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Page 38

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Ser Arg Ser Lys Ser Arg Leu Pro Ser Lys Ser Cys Ser Ile Arg Arg 50 55 60

Phe Phe Ile Gln Asp Ala Lys Ile Ile Lys His Asn Asn Cys Ile Glu 65 70 75 80

Leu Asn Glu Asn Arg Gln Cys Phe Ile Ile Glu Lys Phe Ser Asp His 85 90 95

His Ala Lys Ile Phe Leu Ile Phe Asn Phe Leu Cys Arg Ile Ile Phe Page 62

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Pro Trp Trp Ser Thr His Cys Pro Ser Glu Gly Pro Ser Ser Leu Met

Ser Trp Cys Pro Gly Leu Pro Gly Arg Ile Leu Ala Ala Leu Pro Gly

Pro Glu Met Asn His Trp Glu Glu Ile Gly Asn Glu His Thr Ala Ala

Thr Leu His Pro Asn Pro Val Pro Tyr His Arg Arg Leu Leu Trp Gln

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Tyr Leu Ala Leu Pro Val Asn Ser Leu Ser Phe Phe Cys Asn Leu Phe

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Phe Ile Trp Ser Phe Lys Ile Cys Phe Cys Leu His Ser Tyr Phe Val

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Gln Phe Ile Cys Gly Ile Leu Asp Ser Phe Gly Ser Ser Thr Glu Val

Thr Phe Ile Tyr Arg His Phe Arg Gly Ile His Thr Thr Ser Tyr Asn

Cys Thr Ala Ile Ala Cys His Cys His Val Phe Ile Asn Phe Gln Phe

Leu Glu Asp Phe Ser Ile Ile Ile Tyr Lys Leu Val Lys Phe Thr Val 105

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Gln Lys Ile Asn Pro Asn Phe Asn Thr Ser Cys His His Phe Thr His

Ser Asn Ile Lys Ile Ser Asn Phe Thr Tyr Ile Ser Ser Glu Ser Thr

Asp Lys Leu Phe Tyr Ile Glu Gly Asn Ile Ser Trp Glu Val His Asn

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Thr Asp Pro Ser Ala Leu Pro Thr Leu Trp Ala Leu Ser Leu Phe His

His His Tyr Leu His His Cys Leu Gln Val Phe Tyr Thr Ala Arg Val

Gly Leu Cys Leu Leu Asn Ser Gln Val Lys Arg Gly Arg Lys Leu Thr

Pro Ser Gly Gly Ser Leu Gly Met Ile His Gly Arg Trp Ser Ile Asn 105

Thr Ser Ala Leu Phe Pro Leu Glu Ile Leu Arg Asn Gly Phe Tyr Ile

Val Ser Gln Ser Phe Leu Lys Val Leu Asn Phe Asn His Pro Gln Gly 135

Val Val Gly Phe Ile Ile Val Tyr Ile Pro Leu Trp Leu Pro Phe Leu 155 150

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Leu Leu Cys Ala Ser Gln Ala Arg Leu Gln Ile Ile Thr Leu Leu Lys

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Cys Ser Ala Ser Pro Pro Ile Thr Met Ala Glu Glu Phe Lys Pro Leu

Ser Lys Ala Ser Thr Val Ile Cys Pro Leu Asp Pro Ile Pro Ser Ile 105 100

Phe Leu Phe Ile Glu Thr Phe Ser Met Val Phe Lys His Thr Leu Leu 120

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Leu Gly Tyr Cys Pro Ile Ser Leu Leu Pro Phe Met Ala Glu Leu Leu 155

Glu Arg Val Phe His Asn His Phe Ile Ser Thr Pro Leu Thr Asp Phe 170

Thr Gln Leu Glu Glu Glu Glu Gly Thr Leu Ile Pro Lys Cys Pro Ile 185

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Gly Gly Gln Val Ala Thr Trp Pro Pro Gly His Thr His Gln Glu Phe

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Leu Val Asp Phe Glu Ile Leu Cys Asn His Leu Lys Leu Ala Ser Gly

Pro Gln Leu Asp Gln Ile Pro Val Ser Leu Phe Leu Thr Ser Leu Cys

Trp Thr Thr Tyr Leu Gln Arg Gln Lys Lys Asp Lys Ser Asn Asn Pro

Thr Val Ile Leu His Lys Ser Met Thr Lys Leu Pro Leu Gln Lys Leu

Asn Ser Ser Ser Leu Asn Phe Leu Thr Ile Thr Trp Lys Ser Ala Thr

Met Val Asn Cys Gln Thr Cys Thr Ala Ser Gln Pro Thr Leu Tyr Thr 120

Asn Lys Gly Gly Leu Tyr Ser Asp His Tyr Trp Asn Lys Leu Ser Leu 135

Pro Asn Val Ser Ser His Pro Leu Asn Tyr Leu Leu Leu Tyr Phe

Tyr Thr Ala Ile Lys Leu Lys Leu Lys His Asn Phe Ala His Val 170

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Leu Pro Thr Asn Leu Phe Leu Thr 195 200

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Ser Thr Thr Leu Val Ile Cys Asp Phe Leu Phe Thr Gly His Glu Lys

Pro Phe Thr Asp Trp Leu Gln Cys Ala Ser Leu Pro Tyr Gln Leu Leu Page 68

35

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Lys	Leu 130	Thr	Leu	Tyr	Phe	Ser 135	Ile	Phe	Ser	Leu	Pro 140	Trp	Ser	Lys	Arg
Lys 145	Ile	Arg	Ser	Met	Asn 150	Leu	Arg	Thr	Tyr	Lys 155	Leu	Leu	Val	Glu	Gln 160
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Gln	His	Ser	Asn	Ile 85	Asn	Pro	Val	Glu	Ile 90	Asn	Cys	Gly	Ile	Ala 95	Trp
Phe	Pro	Trp	Met 100	Val	Ile	Gln	Val	Val 105	His	Cys	Thr	Thr	Met 110	Cys	Asn
Ile	Pro	Gly 115	Lys	Arg	Gln	Lys	Phe 120	Ile	Asp	Trp	Leu	Gly 125	Val	Leu	Asn

Ser Gln Gly Lys Leu Phe Asp His Cys Met Pro Ser Thr Trp Glu Asn

His Ile Pro Gln Leu Leu Arg Pro Tyr Cys Met Val Thr Trp Gly Asn

Ile His Thr Val Ser Pro Ala Leu Ser Ala His Lys Gly Asp Ile Val

155

170

135

150

165

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Gln Arg Gly Asn Leu Ser Leu Pro Ser Thr Ser Leu Phe Leu Thr Pro 185

Lys Ser Leu Ser Leu Leu Thr Lys Asp Ile Ser Ala Ser Ala Ile Leu 200

Phe Ala Glu Trp Arg Ile 210

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Ser Phe Val Ile Met Gly Ile Leu Trp Lys Val Thr Trp Arg Leu Cys

Lys Ile Tyr Ser Ser Gln Phe Tyr Leu Pro Val Leu Ala Ser Ile Asp

Val Ser Cys Leu Ser Leu Leu Ala Gln Phe Ala Lys Cys His Tyr Leu

Pro Phe Ser Ser Met Arg Cys Met Tyr Val Tyr Met Tyr Ile Cys Ile

Asp Ile Ser Val Tyr Leu Glu Thr Tyr Ile Asp Glu Leu Ser Ile Thr

Met Ile Ile Tyr Phe Asp Val Gln Val Val Pro Asp Leu Thr Ser Asp 135

Ser Phe Leu Asn Leu Met Tyr Gln Asp Val His Lys His Val Phe Phe

Pro Cys Pro Asn His Pro Gly Val Gly His Leu Ser Lys Met Ser Cys

Phe Cys Leu Leu Arg Trp Arg Ser Gly Ile Gln Lys Ser Arg Ser Val

Cys Leu Val Cys Phe Ile Ala Ile 195

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<211> 191

<212> PRT

<213> Homo sapiens

<400> 147

Tyr Leu Ile Leu Lys Tyr Ile Ile Met Lys Ser Ile Asn Val Ser Arg 10

Gln Arg Ser Tyr Ile Pro Lys Ile Gly Asn Asn Cys Val His Met Cys 20 25 30

Tyr His Thr Ile His Pro Ile Leu Leu Tyr Leu Asn Phe Pro Lys Gln 35 40 45

Pro Val Val Lys Gln Leu Val Met Arg Thr Asn Glu Lys Leu Pro Glu 50 60

Ile Ser Asp Ser Ser Cys Thr Tyr Phe Thr Pro Glu Val Trp Glu Phe65707580

Thr Glu His Asn Val Arg Phe Phe Ser Ile Ser Tyr Pro Leu Pro Lys 85 90 95

Ile Val His Lys Ile Gln Asn Ile Ser Ser Leu Thr Phe Leu Glu Cys 100 105 110

Asn His Thr Leu Asp Asn Tyr Phe Arg Leu Leu Asn Gly Lys Arg Thr 115 120 125

Gly Arg Arg Val Lys Val Thr Cys Phe His Leu Ser Tyr Phe Arg Leu 130 135 140

Thr Ser Lys Ser Phe Phe Thr Leu Phe Leu Ile Leu His Arg Pro Phe 145 150 155 160

Leu Val Lys Ser Ala Asp Ser Lys Tyr Lys Ala Asn Ala Tyr Ser Tyr 165 170 175

Val Ile Phe Met Phe Phe Lys Asn Asn Met Val Leu Thr Ser Ser 180 185 190

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Gly Leu Ser Glu Gly Glu Ala Ser Leu His Leu Asp Phe Phe Leu Lys 1 $$ 5 $$ 10 $$ 15

Ile Thr Thr Ile Met Asn Thr Ala Ala Thr Ser Leu Leu Cys Thr Arg 20 25 30

Gly Ile Ile Leu Gly Val Ser Val Tyr Ala Tyr Pro Glu Ile Ser Ser 35 40 45

Phe Leu Leu Arg Gly Glu Val Leu His Ile Asp Phe Ile Val Arg Asn 50 60

Gly Lys Ile Phe Asn Lys Cys Ile Arg Ala Thr Thr Phe Ser Ala Leu 65 70 75 80

Gln Pro Ala Ser Pro Pro Ser Arg Gln Asp Ile Met Asn Pro Leu Phe 85 90 95

Gly Lys Ala Ala Glu Lys His Val Leu Gln Thr Tyr Tyr His Leu Val

Asn Asn Ser Gln Trp Thr Asp Gln Asn Ser Arg Arg Phe Pro Leu Ser 115 120 125

Leu His Cys Thr Asp Ala Ala Thr His Ala His Ile Pro Leu Asn Leu 130 135

Pro Val Thr Thr Ala Gln Arg Gln Leu Ser Ser Trp Ala Gln Asn His

Trp Gly Thr Phe Trp Gln Leu Ala Asn His Cys Ala Gln Arg Gln Ser

Gln Phe Thr Leu Pro Gln Arg Gly Thr Glu Tyr Thr Ala His Pro His 185

Leu

<210> 149 <211> 195

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Ile Leu Asp Ser Phe Arg Asp Phe Leu Glu Gln Gly Gln Glu Ser Phe

Leu Asp Lys Val Arg Ser Asp Leu Ser Gln Gly Arg Ser Ile Phe Ser

Tyr Thr Arg Arg Asn Phe His His Lys Gln Cys Pro Lys Asp Ala Cys

Tyr His Phe Tyr Ser Met Leu Phe Ser Val Phe Trp Pro Ile Leu Leu

Glu Ile Gln Val Arg Lys Met Thr Lys Gly Ile His Glu Thr Arg Ser

Leu Phe Arg Arg Trp Tyr Asp Cys Leu Ser Arg Lys Lys Glu Met Thr

Pro Ser Phe Trp Glu Phe Thr Asn Ser Gly Trp Val Leu Asp Lys His

Leu Lys Asn Gln Ser Phe Pro Cys Val Ala Ala Ile Thr Ile Lys Met

Glu Met Arg Ser Gly Ala Val Asn Ile Gln Glu Leu Leu Ile Cys 135

Arg Pro Asp Lys Ser Pro Pro Glu Trp Thr Pro Ala Arg Glu Gly Arg

Ser Leu Glu Gly Arg Arg Glu Asp Thr Glu Asp Leu Pro Leu Pro Gln 170

Glu Ala Pro Arg Glu Arg Ala Thr Thr Val Tyr Ser Ser Arg Leu Trp

Gly Asp Ser 195

<210> 150 <211> 168

<212> PRT

<213> Homo sapiens

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Tyr Pro Cys Ser Ala Ser Pro Pro Ile Thr Met Ala Glu Glu Phe Lys

Pro Leu Ser Lys Ala Ser Thr Val Ile Cys Pro Leu Asp Pro Ile Pro

Ser Ile Phe Leu Phe Ile Glu Thr Phe Ser Met Val Phe Lys His Thr

Leu Leu Ser Leu Leu Leu Asn Arg Gln Met Gln Leu Ile Lys Leu Phe

Phe Ser Leu Gly Tyr Cys Pro Ile Ser Leu Leu Pro Phe Met Ala Glu

Leu Leu Glu Arg Val Phe His Asn His Phe Ile Ser Thr Pro Leu Thr 105

Asp Phe Thr Gln Leu Glu Glu Glu Glu Gly Thr Leu Ile Pro Lys Cys 120

Pro Ile Lys Pro Asn Pro Leu Lys Val Leu Cys Cys His Asp Gly Cys

Glu His Gly Glu Lys Ile Leu Glu Asp Val Gly Asn His Asp Arg Glu

Thr Glu Lys Val Val Lys Gly Phe 165

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<212> PRT

<213> Homo sapiens

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Thr Gly His Pro Arg Leu Pro Pro Thr Leu Lys Gln Pro Ala Arg Gln

Cys Val Thr Tyr Gly Phe Asn Ser Asp Glu Glu Asp Ser Ser Trp His

Gly Leu Leu Arg Thr Leu Asn His Lys Val Ser Arg Asp Arg Arg Thr

Val Pro Thr Ala Ala Thr Pro Arg Trp Val Cys Ser Pro Val Ala Thr

Leu Lys Phe Leu Lys Thr Phe Tyr Gly Val Leu Leu Cys His Leu Gly

Trp Ser Ala Val Thr Cys Leu Ile Pro His Leu Ala Glu Thr His Arg

Arg Ser Leu Val Arg Thr Arg Glu Gly Ala Gly His Ser Gly Ser Cys

Gln His Phe Gly Arg Leu Arg Gln Glu

<210> 152

<211> 211

<212> PRT <213> Homo sapiens

<400> 152

Leu Val Ala Ile Ser Leu Lys Phe Phe Phe Cys Arg Lys Ile Ser His

120

Arg Trp Leu Ile Ile Cys His Ile Lys Pro Leu Arg Lys Lys Gly Trp

Gln Met Leu Leu Val Arg Leu Leu Cys Tyr Glu Ile Trp Val Lys

Cys Ala Gly Val Thr Glu Glu Gly Glu Phe Leu Ser Pro Ser Arg Ile

Glu Glu Asn Gly Val Arg Asp Arg Glu Gln Leu Ala Arg Lys Ala Gln

Gly Val Asn Leu Thr Arg Lys Phe Lys Gln Trp Leu Leu Leu Tyr Ser

Leu Phe Val Gln Ile Leu Lys Met Lys Leu Phe Ile Lys Phe Ile Val 105

Val Phe Leu Asn Ser Met Arg Asn Gly Arg Asn Leu Arg Tyr Cys Ser

Lys Gly Ser Ser Ala Pro Asn Leu Phe Leu Thr Lys Phe Ile Leu Leu

Pro Lys Val Ser Pro Asn Val Thr Pro Thr Ser Ile Arg Gln Glu Tyr

Cys Asn Glu Ala Met Thr Ile His Asn Leu Leu Ser Ile Lys Gln Val

His Glu Arg Phe Cys Asn Asn Thr Leu Cys Lys Ser Leu Trp Asn Asn 185

Asn Lys Ile Asp Val His Phe Met Tyr Tyr Cys Ile Leu His Ile Leu 200

Arg His Glu 210

<210> 153 <211> 173 <212> PRT

<213> Homo sapiens

<400> 153

Val Asp His Trp Ile His Leu Asp Met Phe Lys Met Phe Thr Tyr Gly

Val Leu Ile Leu Leu Gly Pro Glu Asn Ala Tyr Ser Gly Ile Leu Leu

Ser Ser Gly Lys Arg Ala Pro Phe Ser Pro Asn Leu Lys Asp His Glu Page 74

And the state That with all H H Hart

40 35 Asn His Leu Lys Cys Leu Leu Glu Val Arg Ile Pro Gln Pro Val Trp Gly Pro Ala Ile Cys Ile Phe Lys Glu Thr Trp Thr Val Thr Cys Glu Lys Pro Tyr Ala Gln Tyr Val Leu Ala Ile Arg Ile Thr Met Val Asn Ile Asn Tyr Leu Phe Arg Glu His Lys Phe Leu Leu Thr Gln Leu Asn Ala Lys Cys Phe Lys Ser Lys Thr Pro Cys Leu Lys Asn Ile Gly Phe Phe Phe Lys Gln Tyr Lys Thr Gly Tyr Leu Ser His Glu Phe Gly Ala Pro Asn Ser His Cys Phe Gln Thr Ile Ser Gln Glu Arg Ser Leu Gln 150 155 Ser Pro Pro Val Ala Ser Ile Ala Leu Cys Val Leu Lys 165 <210> 154 <211> 172 <212> PRT <213> Homo sapiens <400> 154 Gln Ile Leu Gly Ser Lys Arg Arg Lys Met Ser Arg Met Lys Arg Tyr Leu Ile Ile Ser Ser Ala Asp Phe Leu Gly Asn Val Phe Ile Pro Ile Phe Ile Thr Tyr Val Val Lys Asp Ser Phe Ser Gly Leu Tyr Ile Gln Leu Phe Glu Tyr Ile Tyr Asn Asn Ile Tyr Ser Cys Leu Ile Gly Asn Phe Asn Asn Tyr Gln Asn His Lys Glu Ile Phe Phe Ala Cys Phe His Tyr Phe His His Phe Gly Ile Cys Tyr Val Val Lys Lys Tyr Ser Glu Lys Thr Ile Ile Leu Lys Ser Cys Cys Ile Asn Arg Ile Trp Gly Lys

Glu Gln Thr Thr Lys Arg Gly Arg Leu Met Ser Leu Val Gly Thr Trp Glu Val Thr Leu Ile Ser His Phe Leu Asn Leu Lys Glu Glu Lys Val

Lys Leu Ile Asn His Ser Thr Gln Lys Asn Thr Phe Trp Thr Ile Lys 150 155

Asp Ser Ala Ile Tyr Met Asp Tyr Ile Phe Ile Ser 165

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<211> 231
<212> PRT
<213> Homo sapiens
<400> 155
Arg Cys Glu Pro Leu
1 5
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Arg Cys Glu Pro Leu Pro Gly Leu Glu Leu Leu Leu Asp Cys Ile Pro 1 $$ 5 $$ 10 $$ 15

Arg Gly Asn Phe Met Thr Glu Phe Arg Ser Ala His Ile Leu Ala Ala 20 25 30

Ser Lys Arg Glu Arg Glu Ser Pro Ala Leu Ile Ser Val Ile Phe Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45 \hspace{1.5cm}$

Phe Asp Leu Ile Tyr Ser Ile Asn Thr Pro Gln Glu Gly Thr Phe Pro 50 55 60

Ser Pro Ala Pro Lys Gln Asn Arg Ser Ile Leu Asp Gly Leu Pro Asn 65 70 75 80

Trp Cys Leu Gln Thr Ser Ser Leu Ser Pro Ser Pro Thr Leu Lys Ser 85 90 95

Arg Ser Leu Ile Cys Met Gly Cys Ile Ser Thr Leu Met Leu Pro Gly 100 105 110

Phe Trp Leu Gly Leu Pro Asn Gly Arg His His Trp Arg Arg Met Glu 115 120 125

Val Gly Gly Gly Arg Trp Glu Gly Arg Gly Trp Gly Ile Val Pro Leu 130 135 140

Ala Pro Phe Leu Cys Ser Phe Gly Ser Leu Gln His Pro Val Thr Leu 145 150 155 160

Ser Leu Ser His Gln Val Phe Ile Phe Cys Trp Phe Pro Phe Val Leu 165 170 175

Pro Thr Phe Thr Thr Cys Pro Phe Leu Lys Asp Pro Ser Ile Ala Leu 180 185 190

Phe Gly Asn Ile Leu Phe Ser Ala Gly Thr Pro Glu Leu Tyr Arg Arg 195 200 205

Val Gln Glu Ala Thr Lys Leu Gln Met Pro Thr Thr Trp Trp Asn Arg 210 215 220

Cys Pro Leu Glu Ala Ala Ala 225 230

<210> 156

<211> 160

<212> PRT <213> Homo sapiens

<400> 156

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Pro Ser Cys Leu Trp Lys Gly Leu Pro Thr Glu Leu Asp Ser Asn Ile 20 25 30

Gln Ser Ser Ser Thr His Pro Phe Ser Trp Thr Leu Trp Gly Pro Arg

Gln Gln Thr Ser Cys Leu Phe Tyr Arg Ala Ala Leu Gln Met Ala Gly

Ala Thr Val Phe Ser Ala Leu Glu Asp Leu Ser Met Val Val Ser Phe

His Ile Ser Tyr Asp Phe Tyr Ser Gln Glu Ser Leu Ile Cys Leu Leu

Met His Phe His Leu Ser Val Thr Leu Leu Gln Asn Gln Arg Glu Ile

Thr Leu Ile Phe Leu Arg Ala Ser Lys Leu Pro Gly Leu Gln Arg Pro 120

Cys Arg Ala His Arg Gln Arg Met Thr Arg Gly His Met Pro Cys Met 135

His Phe His Leu Ser Val Thr Leu Leu Gln Ala Asn Leu Lys Gly Met

<210> 157

<211> 225 <212> PRT

<213> Homo sapiens

<400> 157

Val Pro Leu Val Asn Pro Glu Tyr Asn Ile Phe Tyr Lys Thr Cys Phe

Ile Leu Ser Gly Met Arg Cys Ile Phe Glu Gly Leu Leu Lys Leu Ala

Ile Thr Ile Arg Leu Leu Leu Asn Leu Gly Ile Ser Leu Pro Ser Cys

Gln Gly Leu Tyr Leu Met Phe Val Ser Leu Lys Lys Lys Arg Asn Gln

Thr Asp Tyr Thr Leu Leu Lys Thr Glu Asp Met Tyr Phe Asn Met Ser

Leu Leu Pro Val Ile Gln Ser Leu Lys Phe Gln Asn Pro Ser Gly Thr

Leu Cys Gly Pro Trp Ile Lys His Thr Trp Ala Tyr Glu Cys Val Asp

His Trp His Met Arg Gly Asn Cys Leu Leu Gly Tyr Val Ala Leu Pro

Leu Ser Ile Tyr Asn Ser Asn Val Ser Glu Arg Ser Ser Ser Leu Lys 135

Leu Phe Ser Arg Ile Arg Gln Thr Val Pro Ala Asn Gln Gly Asp Glu

Phe Trp Pro Met Phe Gly Arg Ser Leu Leu Gln Trp Gly Val Thr Ser

His Glu Arg Ile Ile Arg Asn Leu Ser Thr Thr Leu Gly Asn Leu Ala 180 185 190

Asn Glu Leu Ala Glu Ala Ile Ala Thr Lys Arg Ser Ser Asp Ser Leu 195 200 205

Asp Arg Ile Val Met Asp Asp Gly Ile Thr Leu Gly Tyr Ile Val Val 210 215 220

Lys 225

<210> 158

<211> 215

<212> PRT

<213> Homo sapiens

<400> 158

Leu Pro His Leu Cys Cys Ser Leu Leu Thr Ile Lys Pro Asp Met Cys
1 10 15

Leu Ser Pro Cys Leu Pro Thr His Pro Leu Ile Thr Ser Val Pro Cys
20 25 30

Ser Gln Val Ala Ser Arg Glu Asp Cys Gly Leu Met Ser Ser Phe Met 35 40 45

Pro Trp Leu Leu Leu Ile Arg Ala Leu Tyr Thr Phe Ser Lys Ala Leu 50 60

Glu Ser Lys Lys Val Leu Leu Gly Ser Ser Pro Gln Met Gln Phe Met 65 70 75 80

Lys Ser Val Ser Phe Ser Phe Pro Ser Glu Phe Leu Ser Val Ser Ile 85 90 95

Thr Gln Pro His Gly Tyr Ser Phe Val Leu Leu Asp Asn Asn His Leu 115 \$120\$

Arg Lys Pro Asp Leu Phe Pro His Ser Ser Phe Ser Phe Cys Pro Ala 130 135 140

Glu Asn Lys Arg Thr Ser Cys His Ile Val Ile Cys Ser Ala Leu Leu 145 150 155 160

Leu Arg Ser Leu Val Gly Lys Thr Gly Pro Ile Lys Arg Asp Thr Ala 165 170 175

Met Pro Trp Gly Glu Asp Asn Lys Ser Asp Gly Ser Arg Ala Leu Glu
180 185 190

Ser Arg Gly Gly Val Thr Asn Cys Pro Asn Gly Thr Val Pro Ser Glu 195 200

Leu Leu His Leu Leu Leu Thr

<210> 159

<211> 202

<212> PRT

<213> Homo sapiens

<400> 159

Leu Lys Val Lys Glu Tyr Pro Phe Ile Leu Asp Asn Cys Cys Gln 1 10 15

Arg His Tyr Asn Ile Ser Val Val Ile Pro Tyr Phe Ser Lys Ala Lys
20 25 30

Ile Glu Ile Trp Pro Leu Leu Cys Asn Phe Leu Lys Phe Lys Val\$35\$ 40 45

Ser Val Phe Ser Ile Ile Lys Tyr Ser Ser Leu Lys Leu Met Ala Ile 50 55 60

Arg Tyr Ser Ile Val Trp Ile Ile Tyr Leu Arg Phe Cys Gly Leu Phe 65 70 75 80

Cys Phe Gln Asn Asn Thr Lys Ile Asn Ile Phe Val Cys Lys Tyr Phe 85 90 95

Thr Lys Ile Tyr Ser Glu Lys Phe Leu Lys Val Glu Phe Leu Gly Glu
100 105 110

Val Thr Phe Lys Cys Leu Ile His Leu Leu Ser Gly Lys Thr Val Arg 115 120 125

Phe Leu His Ser His His Ser Val Tyr Gly His Gln Leu Thr Val Phe 130 135 140

Phe Pro Thr Leu Leu Ile Phe Ser Leu Ser Met Trp Ile Lys Phe Gly 145 155 160

Phe Tyr Tyr Phe Asn Leu Tyr Ser Ile Thr Leu Leu Ala Ile Ser Leu 165 170 175

Gly Val Val Asn Ile Cys Pro Cys Pro Phe Leu Phe Gly Met Leu Ser $180 \,$ $\,$ $185 \,$ $\,$ $\,$ $190 \,$

Leu Met Thr Asn Cys His Asn Val Ile Asn

<210> 160 <211> 215

<211> 213 <212> PRT

<213> Homo sapiens

<400> 160

Asn Ile Ser Phe Leu Ser Leu Lys Met Ala Val Ser Cys Val Leu Ile 1 5 10 15

Asn Leu Lys Ile Asn Leu Ser Ile Gly Glu Ala Gly Lys Leu Ala Trp 20 25 30

Lys Val Asn Leu Leu Ser Arg Gly Lys Ile Ser Trp Ala Leu Ile Lys 35 40 45

Val Asp Ile Phe Arg Gly Gly Lys Ser Lys Phe Tyr His Thr Leu Ala 50 60

Phe Val Gln Phe Ser Pro Leu Phe Ser Leu Tyr Tyr Leu Phe Phe Cys
65 70 75 80

Phe Thr Leu Gly Lys Ala Asn Tyr Leu Phe Ser His Ile Phe Trp Gly
Page 79

90 Pro Ile Leu Met Ile Leu Ile Phe Phe Ser Cys Leu Thr Cys Arg Pro

Ser Thr Glu His Cys Arg Ala Ser Ser Gln Arg Ser Ser Gly Asp Glu 120

105

Leu Ser Phe Leu Gly Trp Asp Cys Cys Ala Gly Leu Asp Arg Thr Glu

Asn Cys Arg Asp Lys Tyr Thr Tyr Glu Gln Thr Ser His Leu Phe Ile 155 145 150

Lys Ala Leu His Trp Leu Trp Lys Thr Ala Val Gly Leu Arg Lys Leu

Asn Phe Leu Gly Ile Phe Val Leu Asn Ile Glu Arg Glu Arg Arg

Phe Leu Phe Lys Arg Val Tyr Glu Thr Leu Ser Leu Lys Ser Asn Leu 200

Met Thr Gly Cys Met Cys Ser 210

<210> 161 <211> 199 <212> PRT

<213> Homo sapiens

<400> 161

Lys Ile Gln Ile Leu Cys His Ser Pro Ala Tyr Leu Leu Thr Leu Pro

Leu Leu Ser Lys Phe Ile Ile Leu Thr Val Val Val Asn Ala Leu Leu

Ser Val Pro Cys Pro Phe Val Tyr Thr His Leu Val Leu Leu Ser Phe

Phe Ile Asn Met Leu His His Thr Val Ile Phe Leu Leu Ile Phe Phe

Lys Lys Val Trp Asn Ile Ser Phe Pro Leu Cys Val Leu Cys Asn Leu

Ser Asp Lys Thr Thr Cys Tyr Ile Phe Ser Thr His Asn Phe Ile Ser

Gly Leu Cys Ala Leu Tyr Lys Ser Thr Asn Leu Ser Val Trp Ser Val 100 105

Leu Ser Ser Pro Gly Gln Ile Leu Ile Ile Cys Gln Glu Cys Asn Ser 120

Ile Ile Ser Ser Val Thr Gln Phe Ser Lys His Arg Ile Leu Cys Val

Pro Ile Ala Leu His Trp Ile Gly Pro Gln Phe Cys Gln Cys Ile Ile

Arg Thr Tyr Leu Gln Val Leu Ser Leu Leu Leu Trp Arg Glu Pro Phe 170

Page 80

HEB.ATTS AT THE HEB. AT H. H. H. HOLD world that their their

Ser His Met Asn Cys Asp Phe Val Tyr Leu Ala Pro Thr Met Val Leu 180 185

Asn Ser Trp Val Leu Gly Lys 195

<210> 162

<211> 213

<212> PRT <213> Homo sapiens

<400> 162

Tyr Trp Phe Asn Lys Leu Trp Tyr Asn Gln Ile Met Lys Leu Tyr Ala

Phe Val Lys Val Thr Phe Gln Lys Asn Ile Leu His Arg Ile Thr Asp

Pro Ser Ala Leu Pro Thr Leu Trp Ala Leu Ser Leu Phe His His His 40

Tyr Leu His His Cys Leu Gln Val Phe Tyr Thr Ala Arg Val Gly Leu

Cys Leu Leu Asn Ser Gln Val Lys Arg Gly Arg Lys Leu Thr Pro Ser

Gly Gly Ser Leu Gly Met Ile His Gly Arg Trp Ser Ile Asn Thr Ser

Ala Leu Phe Pro Leu Glu Ile Leu Arg Asn Gly Phe Tyr Ile Val Ser

Gln Ser Phe Leu Lys Val Leu Asn Phe Asn His Pro Gln Gly Trp Ala 120

Leu Ser Tyr Thr Ser Phe Val Ala Ser Leu Pro Ser Cys Leu Thr Ser 135

Pro Phe Gln Thr Arg Ile Tyr Phe Phe Ser Leu Lys Gln Asn Lys Met 150 155

Phe Asn Leu Lys Pro Leu Gln Asn Thr Asn Leu Tyr Leu Lys Asn Leu

Asn Ile Gly Glu Asn Glu Thr Val Tyr Ala Gln Val His Asp Trp Trp

Arg Leu Lys Ser Ser Lys Ile Phe Leu Lys Gly Tyr Pro Ser Arg Arg 200

Leu Asn Cys Leu Ile 210

<210> 163

<211> 236

<212> PRT

<213> Homo sapiens

<400> 163

Leu Ala Ser Glu Ser Leu Leu Val Arg Lys Glu Val Val Leu Phe Pro 10

Page 81

Leu Gln Ala Lys Ala Phe Gln Val Leu Ser Phe Cys Ser Ile Lys Arg

Gln Leu Arg Gly Arg Tyr Pro Gln Glu Phe Pro Asp Ser Cys Thr Asp 40

Leu Ser Ala Glu Ile Ala Glu Val Ser Trp His Leu His Glu His Leu

Ser Val Ala Gly Arg Ile Asn Gly Lys Arg Ala Thr Glu Ile Pro Gly

Ala Lys Ser Ser Ser Glu Ser Pro Ile Phe Asp Gln Glu Leu Val Gly

Ser Leu Arg Ile Cys Ile Ser Ser Asp Ser Arg Leu Ser Gly Leu Ser

Asn Trp Asp Gln Ser Asn Ser Tyr His Ala Tyr Leu Val Pro Gly Ser

Leu Leu Arg Ala Ser Trp Thr Pro Ala Arg Val Ser Pro His Ser Asn

His Met Arg Tyr Val Leu Leu Ser Pro Cys Ala Asp Glu Asp Thr 150

Arg His Arg Glu Asn Trp Pro Gln Val Tyr Ser Trp Gly Gly Gln Ser

Gln Asn Ser Asp Leu Gly Cys Leu Gly Cys Glu Leu Val Trp Ala Ser

Met Gly His Arg Gly Arg Ile Ser Trp Arg Ser Arg Thr Glu Gly Lys 200

Arg Asp Glu Ile Ser Asp Ser Ala Gly Ser Glu Thr Leu Ser Ala Met

Ile Lys Pro Asp Tyr Gly Thr Cys Phe Ser Leu Ser 230

<210> 164

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<212> PRT <213> Homo sapiens

<400> 164

Phe Gln Asp Ile His His Arg Cys Gly Arg Gly Lys Lys Thr Met Gly

Met Gly Ile Leu Pro Phe Ile Asn Thr Gly His Phe Asn Leu Leu Asn

Leu Ser Thr Phe Cys Asn Leu Arg Ile Phe Ile Leu Asp Ser Trp Thr

Lys Ala Leu Glu Met Ala Ser Phe Ala Arg Phe Leu Cys Ala Leu Glu

Lys Ile Pro Gly Phe Asn Ala Lys Asn Arg Gln Gln Arg Ala Gln Glu

Met Glu Leu Ser Gly Val Leu Leu Gln Leu Arg Thr Val Cys Tyr Ser

Pro Phe Lys Ile Ser Pro Asn Leu Tyr Leu Met Val Lys Asp Val Phe 105

Phe Phe Leu Leu Glu Glu Lys Val Thr Arg Ile His Gly Ser Gly Leu 120

Ile Val Leu Leu Met Glu Ile His Lys Gln Phe Leu Lys Tyr Ser

Leu Ala Ser Glu Leu Val Trp Asn Leu Ala Val Tyr Leu Leu Asp Trp

Val Thr Thr Ala Val Ala Gly Ser Ile His Tyr Thr Arg Leu Cys Ile 165

Ser Met Met Ile Val Lys Phe Cys Glu Lys Val Leu His Leu Cys Ser

Leu

<210> 165

<211> 199 <212> PRT <213> Homo sapiens

<400> 165

Leu Phe Ser Ala Phe Ser Leu Ile Leu His Leu Thr Gly Leu Val Val

Asn Ile Leu Lys Val Tyr Val Leu Ile Lys Thr Ser Ser Phe Pro Lys

Glu Lys Lys Ser Gln Phe Gly Leu Val Ser Leu Ser Cys Phe Leu His

Leu Thr Asn Val Ser Phe Ile Tyr Ser Phe Cys Ser Val Thr Phe Arg

Met Ile Leu Met Gly Lys Asn His Gly Ser Tyr Lys Gln Pro Phe Lys 65 70 75 80

Thr Ile Val Ile Leu Cys Ser Val Asp Ser Gly Arg Gly Phe Lys Val

Ile Ile Ser Leu Lys His Cys Val Asn Ile Pro Pro Thr Val Val Pro

Leu Gly Thr Gly Lys Ile Gln Asn Trp Pro Ala Ser Ser Leu Thr Arg 120

Val Ile Lys Val Arg Leu Leu Tyr Ile Lys Gln His Leu Asn Ala Trp

Cys Val Ala Ala Gly Lys Gln Pro Arg Ser Pro Ser Cys Ile Arg Gly

Leu Met Asn Val Ser Ile Ala Val Phe Ala Val Thr Arg Ser Gly Arg 170

Val Phe Pro Ser Ser Leu Asp Cys Leu Pro Met His Thr Gly Val Cys Page 83

190

<213	-
<400)
Ile 1	7
Val	I
Leu	7
Thr	I
Trp 65]

THE STREET STREE

<400> 166

185

Val Ala Cys Gly Ser Leu Cys Ser Cys Leu Pro Ser Trp Ala Gln Tyr 20 25 30

Leu Val Leu Cys Leu Gly Phe Thr Asn Ala Thr Asn Thr Tyr Ala Pro 35 40 45

Thr Leu Cys Gln Val Leu Cys Tyr Met Leu Arg Lys Gln Cys Thr Arg 50 55 60

Trp Ile Arg Phe Ser Ser Leu Trp Cys Pro Ser Ser Gly Lys Asp Arg 65 70 75 80

Leu Ser Val Phe Tyr Gly Gln Ala Tyr Arg Ala Lys Lys Thr Cys Val $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$

Arg Leu Arg Val Ile Val Gly Arg Ala Leu Gln Ala Gly Gly Ser Ala 115 120 125

Cys Ala Arg Val Leu Arg Lys Glu Gly Glu Gln Cys Val Arg Asn Ile 130 140

Thr Val Val Ala Thr Gln 145 150

<210> 167

<211> 218 <212> PRT

<213> Homo sapiens

<400> 167

Asn Lys Ala Thr Phe Tyr Gly Ile Ile His Phe Cys Phe Glu Lys Tyr
20 25 30

Thr Leu Phe Lys Tyr Tyr Cys Leu Phe Thr Gln Leu Leu Glu His Ser 35 40 45

Ser Ala Lys Ala Phe Met Ile Phe Thr Asn Leu Ala Phe Ile Phe Ala 50 60

Leu Leu Ser Thr Ile Thr Lys Val Ile Thr Thr Cys Ser Pro Thr Asn 65 70 75 80

Tyr Ser Asp Gly Ala Leu Arg Ile Asp Leu Tyr Leu Asn Ile Leu Trp Page 84

90

Tyr Gln Val Phe Leu His Ser Ser Arg Ile Phe His Phe Ala Tyr Ile 100 \$100\$

Leu Met Met Ser Ser Arg Ile Ser Ser Leu Thr Tyr Leu Ala Asn Tyr 115 120 125

Lys Tyr Val Ile Phe Val Lys Tyr Leu Arg Val Cys Ser Ala Ile Tyr 130 135 140

Leu Val Ile Leu Asn Gln Ile Leu Asn Val Tyr Thr Phe Leu Met Tyr 145 150 155 160

Asn Phe Gln Phe Phe Arg Met Arg Leu Asn Asn Cys Pro Tyr Tyr Ser 165 170 175

Phe Ile Thr Thr Leu Ile Tyr Leu Leu Tyr Leu Gln Met Ile Tyr Lys 180 185 190

Asn Ala Phe Leu Tyr Leu Ser Leu Ser Gln Val Leu His Ser Glu Leu 195 200 205

Phe Phe Leu Phe Val Phe Leu Arg Tyr Ile 210 215

<210> 168

<211> 204

<212> PRT

<213> Homo sapiens

<400> 168

Tyr Cys Glu Leu Arg Cys Tyr Ile Ser Glu Cys Asn Glu Trp Asp Ile 1 5 10

Ala His Trp Leu Glu Lys Pro Pro Lys Gln Ala Ala Ser Ala Ile Glu 20 25 30

Leu Leu Ala Trp Ser Arg His Ser Ala Ser Gly His Gly Asp Asn Ser 35 40 45

Ser Glu Ile Asn Ser Ser Thr Lys Val Ser Asn Asp Val Ile Ser Ser 50 55 60

Gln Arg Gln Gly Cys Pro Val Lys Gln Thr Asp Gly Gln Ser Pro Pro 65 70 75 80

Arg Leu Lys Gly Gly Glu Thr Gly Arg Lys Arg Met Arg Trp Val 85 90 95

Arg Lys Arg Tyr Asn Leu Arg Val Thr Met Ser Ser Cys Ser Pro Arg 100 105 110

Trp Gln Trp Val Gly Gly Pro Gly Lys Asp Cys Phe Arg Gln Met Glu $115 \\ 120 \\ 125$

Gln Cys Met Arg Arg Ser Arg Glu Lys Ser Gln Ile Val Cys Ile His 130 135 140

Val Leu Gln Asn Arg Glu Ser Asn Arg Tyr Leu Gly Lys Lys Glu 145 150 155

Val Ser Leu Phe Leu Ser Leu Lys Val Gln Lys Trp Ala Phe Pro Gln 165 170 175

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of his first first first first first in the second second

Phe Ile Cys Gln Pro His Glu Val Phe Thr Asp Leu Asp Leu Leu Ile 185

Ser Cys Tyr Phe Ile Thr Leu Leu Glu Leu Leu Pro 195 200

<210> 169

<211> 158

<212> PRT <213> Homo sapiens

<400> 169

Lys Val Leu Ile Phe Val Leu Arg Pro Ile Tyr Thr Tyr Lys Cys His

Pro Ser Ile Phe Leu Cys Asn Phe Leu Ser Ala Gly Leu Pro Ser Leu

Met Cys Val Leu Tyr Phe Pro Tyr Ile Cys Tyr Pro Ile Thr Cys Phe

Tyr Asn Cys Leu Phe Tyr Phe Pro Phe Phe Ser His Cys Leu His Ala

Leu Phe Leu Val Leu Asn Ser Ile Thr Leu Ile His Cys Ser Ser Asn

Phe Ile Leu Asn Asn Phe Pro Ile Tyr Leu Asp Ile Tyr Leu Asn Val

His Ile Ser Pro Leu Ile Glu Val Cys Leu Val Ile Phe Gly Met Met

Leu Asn Leu Phe Leu Trp Lys Gly Thr Asn Thr Cys Met Phe Met His

Val Gln Lys Cys Ser His Arg Met Ile Ile Lys Ala Asp Leu Gly Lys

Lys Thr Ser Leu Ile Phe Ile Phe His Ile Arg Phe Phe Glu 145 150 155

<210> 170

<211> 198

<212> PRT

<213> Homo sapiens

<400> 170

His Gln Asn Ser Pro Ile Tyr Leu Arg Ile Asn Val Asn Phe Glu Phe

Asp Ile Thr Met Ile Lys Gly Ala Leu Ile Phe Ser Arg Ser Tyr Lys

Ile Phe Val Asn Glu Leu Ile Gly Arg Ile Cys Leu Leu Lys Ser Glu

Val Gly Gly Glu Leu Lys Leu Gly Leu Ile Gly Asn Tyr Ile Trp Val

Met Asn Ala Trp Gly Phe Ile Ile Pro Leu Pro Leu Pro Leu Ser Val 70

Phe Glu Leu Cys His Cys Glu Asn Ile Val Leu Lys Ala Val Leu Phe 85 90 95

Phe Leu Leu Arg Gly Ser Lys Lys Ser Lys Lys Tyr Thr Gly Leu Ile 100 105 110

Glu Tyr Val Cys Ser Asn Lys Ile Pro Gly Phe Ser Phe Val Leu Ala 115 120 125

Ser Arg Asn Gln Val Gln Phe Val Ser Lys Asp Phe Ala Thr Cys Gly 130 140

Gly Lys Leu Euu Gln Asp Leu Ile Val His Ser Gln Arg Leu Ser Ala 145 150 155 160

Ala Arg Gln Ala Ala Phe Tyr Glu Asn Asp Asn Gln Lys Ala Gly Ala 165 170 175

Leu His Thr Gly His Ser Ser Asn Glu Ser Trp Asp Leu Asp His Gly 180 185 190

Ser Leu Thr Trp Ala Ala 195

<210> 171

<211> 176

<212> PRT

<213> Homo sapiens

<400> 171

Ser Phe Leu Phe Ile Ser Leu Leu Pro Phe Ile Ser Phe Ile His Met $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$

Leu Ser Leu Asn Thr Leu Leu Leu Leu Leu Thr Val Ile Phe Gln Ile 35 40 45

Ser Glu Lys Asn Leu Ile Leu Pro Tyr Ser Thr Phe Leu Met Leu Phe 50 60

Leu Phe Tyr Ala Val Leu Phe Asp Ile Ser His Arg Ala Gly Gln Leu 65 70 75 80

Ala Met Asn Tyr Ser Ser Phe Val Cys Gln Lys Ile Ser Leu Phe Leu 85 90 95

Ile Arg Ile Ile Leu Leu Asn Ala Glu Phe Gly Ser Phe Phe Val Ala $100 \hspace{1cm} 105 \hspace{1cm} 110$

Thr Leu His Val Phe Ser Phe Leu Cys Val Cys Met Val Ser Glu Glu 115 120 125

Lys Asp Asn Val Ile Leu Ile Leu Phe Pro Leu Trp Ile Arg Cys Trp
130 140

Leu Phe Pro Leu Ser Ser Phe Phe Gln Asp Phe Leu Phe Ser Leu Val 145 150 155 160

Phe Cys Ser Leu Asn Met Ile Cys Leu Gly Gly Asp Leu Asp Leu Leu 165 170

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<210> 172
<211> 195
<212> PRT
<213> Homo sapiens
<400> 172
Ala Tyr Arg Ile Ser
1 5
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Ala Tyr Arg Ile Ser Thr Thr Val Phe Ala Lys Glu Lys Ser Val Val 1 5 10 15

Ile Lys Phe Ile Leu Trp Leu Asn Tyr Val Leu Gl
n Phe Val Gly Pro $20 \\ 20 \\ 25 \\ 30$

Val Thr Cys Gly Arg Gln Arg Ala Val Gly His Ser Val Lys Ala Thr 35 40 45

Thr Arg Val Leu Ser Ile Glu Ser Leu Cys Ile Met Val Leu Ala Arg 50 60

His Cys Ser Leu Thr Ser Ile Phe Leu Ser Gln Ser Ser Leu Arg Asn 65 70 75 80

Ala Cys Ser Thr Gly Leu Ile Ile Leu Thr Glu Thr Ser Gly His Phe 85 90 95

Met Ser Tyr Gly Met Leu Ala Glu Asp Ile Lys His Arg Cys Val Gly 100 105 110

Ile Gly Gly Glu Ser Thr Ala Ile Phe Gln Leu Gly Ala Pro Trp Phe 115 120 125

Pro Glu Ile Gln Ser His Gly Val Asn Gln Thr Pro Leu Ser Gly Ala 130 135 140

Leu Cys Ser Thr Gln Asp Pro Thr Leu Ser Gly Lys Leu Lys Thr Lys 145 150 150

Ser Leu Leu Tyr Ile Arg Phe Ile Lys Asn Ala Thr Ile Thr Lys Ser 165 170 175

Leu Trp Ala Cys Val Glu Asn Ala Val Ile Lys Leu Asn Ile Lys Ala 180 185 190

Ser Ser Lys

<210> 173 <211> 225

<211> 225 <212> PRT

<213> Homo sapiens

<400> 173

Gln Arg Leu Thr Tyr Ser Asn Cys Ile Val Asp Trp Ala His Thr Leu $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

His Val Thr Asn Val Ser Asn Tyr Trp Ile Cys Thr Ala Leu Pro Ala 20 25 30

Gly Leu Arg Met Ala Cys Leu Gly Thr Tyr Ile Leu Cys Leu Gln Arg 35 40 45

Thr Gly His Gly Trp Arg Leu Gly Gly Pro Met Ala Asp Ala Trp Asn 50 60

Ala Thr Trp Gln Leu Trp Thr Lys Asp Ala Ala Arg His Met Val Cys

Pro Thr Pro Gly Trp Pro Ile Ala Phe Met Met Gly Leu Ala Ser Gly

Glu His Val Val Leu Pro Ala Gln Val Pro Gln Cys Ile Glu Gln His

Trp Gly Asn Thr Thr Val Gly Trp Val Pro Val Thr Ala Phe Ala Asn

Ile Thr His Val Thr Thr Lys Val Arg Pro Leu Thr Leu Cys Pro Leu

Gly Val Tyr Gly Ser Val Gly Thr Gln Ser Arg Phe Thr Tyr Pro Thr

Ala Leu Asp Ile Val Pro Gly Gly Gly Leu Met Cys Leu Pro Leu Phe

Ser Pro Cys Cys Pro Asp Ala Arg Ile Thr Gly Arg Cys Tyr Thr Leu 185

Ser Leu Cys Glu Cys Asn Glu Pro Pro Ala Val Leu Pro Phe Gly Ser

Asp Tyr Pro Trp Ser Gly Cys His Asn Cys Arg Ser Thr Gly Tyr Cys

Ser 225

<210> 174

<211> 169

<212> PRT <213> Homo sapiens

<400> 174

Phe Met Ile Gln Gln Ile Lys Cys Gly Asn Tyr Leu Lys Arg Lys Lys

Lys Asn Ile Trp Glu Ala Ala Glu Met Arg Thr Ile Arg Asn Glu His

Phe Tyr Phe Leu Ser Phe Leu Asn Gly Ala Ser Asp Ala Val Phe Ile

Ala Leu Phe Phe Pro Asn Trp Asn Ile Phe Phe Leu Ile Leu Leu Val

Tyr Ser Leu Val Thr Lys Lys Val Phe Arg Lys Tyr His Asn Phe Pro

Asn Ser Leu Leu Ser Ala Gly Asp Tyr Glu Tyr Ile Leu Gln Asn Gly

Lys Gly Gly Ser Ser Gly Pro Ala Thr Ile Cys Ile Leu Lys Asp Leu

Val Glu Leu Lys Ser Gln Arg Lys Trp Glu Glu Leu Ser Lys Tyr Phe

Ile Ile Phe Phe Leu Glu Tyr Gln Val Leu Ile His His Ile Phe His Page 89

His Val Ser Lys Ser Phe Phe Leu Lys Lys Val Cys Ile Tyr Ile Ser 145 150 155 160

Lys Arg Val Ser Val Val Lys Lys Asn 165

<210> 175

<211> 199

<212> PRT

<213> Homo sapiens

<400> 175

Glu Asn Thr Tyr Gly Lys Glu Leu Ser Val Arg Phe Gly Ser Gln Ile $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Leu Ile Phe Asn Lys Ile Tyr Ile Cys Ser Pro Cys Thr Lys Gly Asn 20 25 30

Ser Thr Glu Ser Met Pro Asn Ser Lys Gly Met Thr Leu Asn Leu Tyr 35 40 45

Ser Lys Tyr Ile Gly Pro Ala Ile Leu Cys Gln Met Leu Tyr Leu Tyr 50 60

Leu Ile Ala Thr Arg Thr Gly Asn Cys Ala Gln Leu His Leu Arg Thr 65 70 75 80

Val Ser Ile Leu Lys His Thr Ser Tyr Ser Ser Ser Asp Pro His Trp 85 90 95

Met Lys Leu Asn Gln Thr Lys Gln Lys Ser Tyr Leu Ser Pro Asn Asn 100 105 110

Glu Arg Val Cys Arg Met His Ile Val Arg Leu Thr Asp Pro Phe Arg 115 120 125

Gln Tyr Val Gly Phe Pro Arg Ile Leu Ser Ala Ser Lys Gln Phe Glu 130 135 140

Phe Ser Ser Ala Leu Met Ile Trp Phe Pro His Leu Asp Gly Pro Gly 145 150 155 160

Ser Asp Ala Arg Gly Pro His Glu Met Ser Trp Ala Phe Ile Gln Asp $165 \hspace{1.5cm} 170 \hspace{1.5cm} 175$

Pro Val Ala Pro Ala Gl
n Glu As
n Arg Pro Leu Arg Val Ser Gly Ser 180 $\,$ 180 $\,$

Glu Met Ala Ser Val Thr Arg 195

<210> 176

<211> 204

<212> PRT

<213> Homo sapiens

<400> 176

Leu Phe Asn Phe Val Phe Val Ala Val Cys Ile His Val Cys Trp $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Cys Pro Tyr Val Leu Phe Gly Val Trp Leu Phe Ser Gln Asn Gln Val Page 90 ATTENTION OF THE CONTROL OF THE REAL PROPERTY OF THE STATE OF THE STAT

Thr Val Lys 35	Ser Le	eu Asn	Phe	Ser 40	Ile	Ser	Leu	Leu	Ser 45	Ser	Gly	Thr
Val Thr Val 50	Cys Le	eu Leu	Leu 55	Lys	Ser	Phe	Val	Phe 60	Leu	Thr	Arg	Gly
Glu Val Tyr 65	Ser Th	r Leu 70	Thr	Gly	Leu	Tyr	Phe 75	Gly	Leu	Arg	Pro	Tyr 80
Lys Thr Phe	Leu Ly		Leu	Ile	Ile	Cys 90	His	Ile	Ile	Lys	Lys 95	Leu
Tyr Gly Ile	Phe Se	er His	Tyr	Ile	Leu 105	Ala	Thr	Met	Pro	Val 110	Tyr	Ile
Ser Lys Gln 115	Thr I	e Cys	Gly	Asn 120	Asn	Leu	Lys	Lys	Lys 125	Ala	Ile	Gly
Ser Lys Tyr 130	Leu Il	e Lys.	Tyr 135	Pro	Leu	Glu	Leu	Asn 140	Ile	Ser	Ser	Cys
Gly Ser Ser 145	His Th	r Lys 150	Tyr	Pro	Thr	Leu	Leu 155	Ser	Phe	Arg	Val	Leu 160
Ala Gly Thr	Gly Se		Lys	Asp	Asn	Glu 170	Leu	Lys	Lys	Gly	Thr 175	Ile
Tyr Lys Tyr	Val Al 180	.a Arg	Leu	Gly	Glu 185	Thr	Ser	Lys	Val	Gly 190	Asn	Ala
Ala Gln Asp 195	Ser As	sn Lys	Ser	Glu 200	Asn	Leu	Phe	Leu				
<210> 177 <211> 201 <212> PRT <213> Homo	sapier	ns										
<211> 201 <212> PRT	sapier	ns										
<211> 201 <212> PRT <213> Homo	_		Thr	Val	Phe	Ser 10	Ser	Val	Ala	Ser	Thr 15	Pro
<pre><211> 201 <212> PRT <213> Homo <400> 177 His Val Thr</pre>	Leu Me	et Ser				10					15	
<211> 201 <212> PRT <213> Homo <400> 177 His Val Thr 1	Leu Me 5 Ser Ty 20	et Ser yr Asp	Asn	Ser	Ala 25	10 Ser	Gln	Thr	Tyr	Gly 30	15 Leu	Arg
<pre><211> 201 <212> PRT <213> Homo <400> 177 His Val Thr 1 Leu Pro Asn Asn Pro Leu</pre>	Leu Me 5 Ser Ty 20 Lys Se	et Ser yr Asp er Gln	Asn Leu	Ser Val 40	Ala 25 Met	10 Ser Thr	Gln Pro	Thr Lys	Tyr Arg 45	Gly 30 Phe	15 Leu Phe	Arg Ile
<pre><211> 201 <212> PRT <213> Homo <400> 177 His Val Thr 1 Leu Pro Asn Asn Pro Leu 35 Ile Ile Leu</pre>	Leu Me 5 Ser Ty 20 Lys Se	et Ser er Asp er Gln	Asn Leu Ile 55	Ser Val 40 Leu	Ala 25 Met Leu	10 Ser Thr	Gln Pro Val	Thr Lys His	Tyr Arg 45 Phe	Gly 30 Phe	15 Leu Phe Glu	Arg Ile Asn
<pre><211> 201 <212> PRT <213> Homo <400> 177 His Val Thr 1 Leu Pro Asn Asn Pro Leu 35 Ile Ile Leu 50 Asn Leu Phe</pre>	Leu Me 5 Ser Ty 20 Lys Se Tyr I: Ser Ly	et Ser yr Asp er Gln le Asn ys Ile 70 et Pro	Asn Leu Ile 55 Ser	Ser Val 40 Leu Glu	Ala 25 Met Leu	10 Ser Thr Glu Asn	Gln Pro Val Ser 75	Thr Lys His 60	Tyr Arg 45 Phe	Gly 30 Phe Tyr	15 Leu Phe Glu His	Arg Ile Asn Ile
<pre><211> 201 <212> PRT <213> Homo <400> 177 His Val Thr 1 Leu Pro Asn Asn Pro Leu 35 Ile Ile Leu 50 Asn Leu Phe 65</pre>	Leu Me 5 Ser Ty 20 Lys Se Tyr II Ser Ly Leu Me 89	et Ser or Asp er Gln le Asn or Ile 70 et Pro	Asn Leu Ile 55 Ser Gly	Ser Val 40 Leu Glu Leu	Ala 25 Met Leu Lys Ile	10 Ser Thr Glu Asn Glu 90	Gln Pro Val Ser 75 Asp	Thr Lys His 60 Ile Asn	Tyr Arg 45 Phe Ile	Gly 30 Phe Tyr Leu	Leu Phe Glu His Met 95	Arg Ile Asn Ile 80 Ser
<pre><211> 201 <212> PRT <213> Homo <400> 177 His Val Thr 1 Leu Pro Asn Asn Pro Leu 35 Ile Ile Leu 50 Asn Leu Phe 65 Gly Ile Phe</pre>	Leu Me 55 Ser Ty 20 Lys Ser Ly Ser Ly Leu Me 85 Phe As	et Ser yr Asp er Gln Le Asn ys Ile 70 et Pro 5	Asn Leu Ile 55 Ser Gly Phe	Ser Val 40 Leu Glu Leu Gln	Ala 25 Met Leu Lys Ile Tyr 105	10 Ser Thr Glu Asn Glu 90 Val	Gln Pro Val Ser 75 Asp Ser Glu	Thr Lys His 60 Ile Asn Leu	Tyr Arg 45 Phe Ile Val Gly 125	Gly 30 Phe Tyr Leu Phe Glu 110	Leu Phe Glu His Met 95 Ile	Arg Ile Asn Ile 80 Ser

25

Gln Pro Phe Trp Thr Thr Val Asp Ile Val Leu Tyr Tyr Asn Lys Thr 130 135 140

Gly Glu Val Val Gly Ser Lys Leu Val Ala Thr Trp Asn Leu Lys Pro 145 150 150 160

His His Glu Leu Phe Val Ile Trp His Ile Lys Ile Tyr Leu Ser Ile 165 170 175

Leu His Phe Glu Trp Asp Pro Leu Leu Met His Leu Phe Val Thr Ile 180 \$180\$

Ile Ser Asn Thr Leu Val His Val Met

<210> 178

<211> 216

<212> PRT

<213> Homo sapiens

<400> 178

Lys Arg Ile Met Tyr Arg Gly Cys His Gly Asn Ser Ser Gly Asn 20 25 30

Ser Val Pro Phe Val Lys Thr Leu Lys Gly Glu Asp Lys Gln Phe Gly 35 40 45

Glu Ile Thr Ala Pro Glu Ile Glu Phe Ile Cys Asn Leu Gly Ser Leu 50 55 60

Val Cys Leu Pro Ala Ile His His Val Asp Glu Lys Gln Lys Asp Lys 65 75 80

Lys Asp Ser His Phe Lys Ala Pro Asn Cys Gln Phe His Ser Ile Ala 85 90 95

Asp Ser Gln His Arg Arg Lys Trp Asp Asn Ala Gly Arg His Tyr His 100 105 110

Arg Thr Val Ser Ser Lys Glu Lys Pro Asn Cys Tyr Phe Ser Met Ala 115 120 125

Glu Gly Gly Cys Phe Pro Arg Gly Arg Ile Leu Phe Asn Pro Val Arg 130 135 140

Ala Gln Leu Gln Pro Ser Val Thr Gly Gln Leu Pro Pro Ser Asn Pro 145 150 155 160

Glu Gly Arg His Glu Pro Tyr Ser Arg Thr Gly Ala Cys Ser Leu Leu $165 \hspace{1.5cm} 170 \hspace{1.5cm} 175$

Ser Thr Ser Cys Thr Phe Arg Ala Pro Ala Trp Asp Ala Glu Asn Ser 180 185 190

His Pro Ser Arg Ala Ala Glu Asp His Met Thr Asp His Gln Leu Phe 195 200 205

Leu Thr His Leu Ser Thr Thr Thr 210 215

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<210> 179
<211> 189
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<211> 109 <212> PRT

<213> Homo sapiens

<400> 179

Tyr Leu Leu Ser Ala Phe Cys Phe Arg Leu Leu Asn Leu Tyr Ile Lys 20 25 30

Thr Cys Tyr Thr His Leu Ala Val Phe Phe Phe Ala Ala Val Thr Ser 35 40 45

Phe Trp Leu Arg Phe Phe Lys Lys Met Tyr Lys Thr Leu Gly Leu 50 55 60

Ile His Cys Ser Phe Phe Val Leu Ile His Pro Gln Glu Arg Lys Trp 65 70 75 80

Leu Ser Leu Tyr Val Phe Lys Gly Leu Cys Glu Leu Leu Lys Ala Ser 85 90 95

Gly Val Ser Ser Leu Thr Glu Arg Gly Ile Glu Leu Phe Arg Met Phe $115 \,$ $120 \,$ $125 \,$

Ser Phe Gln Gln Met Ser Ser Asn Leu Thr Asn Leu Asp Leu Val Phe 145 150 150 160

Pro His Gly Pro Arg Ser Ala Ile Leu Phe Phe Cys Leu His Leu Ile 165 170 175

Ser Tyr Ala His His Cys Ala Asn Ser Arg Leu Phe Ser 180 185

<210> 180

<211> 157

<212> PRT

<213> Homo sapiens

<400> 180

Val Ala Ile Cys Gln Val Pro Thr Asp Ile Pro Asn Ile Arg Leu Thr 1 5101515

Pro Ser Asn Gln His Pro Glu Phe Lys Val Cys Ile His Phe Leu Tyr 20 25 30

Phe Tyr Cys Ile Arg Ile Ser Leu Asn Ser Ser Val Phe Ser Thr Phe 35 40 45

Ile Ile Phe Met Arg Leu Met His Ile Ala Val Tyr Ser Phe Leu Leu 65 70 75 80

Leu Tyr Asn Ser Val Ile Pro Gly Met Gly Arg Gly Asn Trp Phe Gln
95

Asp Leu Cys Gly Leu Gln Asn Pro Ser Met Phe Lys Ser Leu Ile Asn 100 105 110

Glu Ala Val Leu Ala Tyr Asn Leu Cys Thr Phe Leu Arg Thr Leu Ser 115 120 125

Lys Cys Tyr Val Asn Gly Cys Phe Val Ile Cys Ile Ile Phe Ile Val 130 135 140

Met Phe Phe Leu Leu Phe Ser Pro Glu Phe Phe Phe 145 155

<210> 181

<211> 219

<212> PRT

<213> Homo sapiens

<400> 181

Val Thr Leu Val Cys Tyr Ser Leu Met Val Arg Ser Leu Ile Lys Pro 1 5 10 15

Glu Glu Asn Leu Met Arg Thr Gly Asn Thr Ala Arg Ala Arg Ser Ile 20 25 30

Arg Thr Ile Leu Leu Val Cys Gly Leu Phe Thr Leu Cys Phe Val Pro 35 40 45

Phe His Ile Thr Arg Ser Phe Tyr Leu Thr Ile Cys Phe Leu Leu Ser 50 60

Gln Asp Cys Gln Leu Leu Met Ala Ala Ser Val Ala Tyr Lys Ile Trp 65 70 75 80

Arg Pro Leu Val Ser Val Ser Ser Cys Leu Asn Pro Val Leu Tyr Phe 85 90 95

Leu Ser Arg Gly Ala Lys Ile Glu Ser Gly Ser Ser Arg Asn Gly Arg 100 105 110

Thr Ser Trp Val Ser Ile Gln Leu Gly Gly Arg Asp Ala Gln Gly Thr 115 120 125

Asp Leu Gly Asn Ala Lys Val Lys Leu Gly Lys Asn Glu Leu Gln His 130 135

His Gln Gln Leu Val Cys Thr Gln Met Ser Ala Gly Gly Arg Gly Ala 145 150 150

Gln Asp Leu Leu Lys Val Ser Cys Cys Lys Gly His Phe Tyr Ile Asp 165 170 175

Val Lys Val Asn Lys Ser Met Glu Arg Ala Thr Lys Thr Lys Glu Asn 180 185 190

Phe Leu Lys Glu Ser His Trp Ser Leu Val Ile Gln Val Ser Ala Gln 195 200 205

Met Ser Pro Leu Arg Asp His Ser Cys Pro Pro 210

<210> 182

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<211> 181
<212> PRT
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<213> Homo sapiens

<400> 182

Gln Gly Glu Gly Gly Thr Gly Tyr Lys Arg Ser Ala Ala Ala Pro

Ala Glu Ser Arg Arg Ala Gln His Ser Cys Pro Leu Asp Pro Ala Asp

Pro Ser Arg Ala Pro Ser Val Pro Gln Ala Gln Pro Pro Gly Gly Arg

Ala Glu Gly Ser Pro Gly Arg Cys Gln Gly Ala Ile Leu Glu Gly Gly

Arg Glu Glu Glu Val Arg Ala Ala Met His Thr Val Ala Thr Ser Gly

Pro Asn Ala Ser Trp Gly Ala Pro Ala Asn Ala Ser Gly Cys Pro Gly

Cys Gly Ala Asn Ala Ser Asp Gly Pro Val Pro Ser Pro Arg Ala Val

Asp Ala Trp Leu Val Pro Leu Phe Phe Ala Ala Leu Met Leu Leu Gly 120

Leu Val Gly Asn Ser Leu Val Ile Tyr Val Ile Cys Arg His Lys Pro

Met Arg Thr Val Thr Asn Phe Tyr Ile Gly Glu Cys Gly Pro Leu Arg

Arg Thr Cys Cys Arg Pro Gly Gly Leu Arg Gly Pro Ser Gly Leu Gly 170

Arg Pro Leu Ala Thr

<210> 183

227 <211>

<212> PRT

<213> Homo sapiens

<400> 183

Ile Ile Leu Gln Asp Asn Leu Lys Gln Tyr Leu Val His Ile Asn His

Phe Ile Ser Ala Gly Leu Leu Ser Phe Glu Asn Tyr Phe Tyr His Leu

Leu Leu Ala Thr Val Asn Leu Ser Asn Leu Val Ser His His Ser Leu

Ile Pro Cys Ser Ala Leu Val Thr Met Asn Leu Ser Leu Leu Leu Lys

Tyr Ala Ile Tyr His Val Phe Phe Phe Pro Phe Ser Leu Pro Glu Ala

His Thr Pro Ser Leu Gly Trp Leu Lys Ser His Asn Leu Thr Phe Gly Page 95

00100US1.ST25 90 Leu Thr Phe Tyr Asn Ser Leu Tyr Gln Pro Gln Asn Met Ala Trp Val 105 Met Leu Ala Leu Thr Val Leu Asp Phe Ser Asp Pro Ser Leu Leu Ile Tyr Gln Pro Leu Ser Arg Ser Phe Gly Thr Tyr Ser Asp Phe His Thr Pro Glu Leu Phe Ala Ile Leu Phe Ile Trp Lys Ser Tyr Trp Val Ile 150 Phe Leu Phe Lys Tyr Asn Leu Ile Ile Thr Pro Leu Val Tyr Leu Ala Leu Ser Cys Ser Leu Tyr Phe Pro Cys Pro His Leu Asn Ser Leu Thr Gly Glu Ile Asn Tyr Arg Tyr Thr Lys Gly Pro Asp Ser Lys Arg Asn Ile Gly Lys Ile Ser Ser Pro Ser Gln Pro Gly Tyr Gln Ile Lys Asp 210 Arg Arg Leu 225 <210> 184 <211> 191 <212> PRT <213> Homo sapiens <400> 184 Pro Pro Thr Asp Ile Ser Val Cys Cys Ser Asp Gln Val Leu Gly His 10 His Gln Cys Pro Val Val Met Gly His Leu Lys Leu Tyr Leu Tyr Pro Ser Ala Leu Leu Asp Leu Leu His His Leu Leu His Met Asp Leu

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Cons.

Leu His Phe Gly Cys Val Val His His Leu His Thr Leu Pro Asn Lys

Asn Ile Gln Lys Pro Ser Ser Gln His His Cys Pro Gly His His Ser

Ser Leu Phe Phe Leu Asn Pro Ser Leu His Glu Arg Gln Arg Arg Leu

Thr Gly Ser Pro Leu Leu Val Asn His Met Lys Ile Lys His Ala Tyr 105

Ser Val Leu Val Gln Gln Glu Ile Tyr Phe Gln Thr Arg Lys Ala Thr 120

Glu Thr Leu Gly Ile Ile Leu Gly Ala Phe Ile Ile Cys Trp Leu Pro

Leu Phe Ile Val Ser Leu Pro Ala Lys Ile Pro Pro Tyr Asp Ile Phe 150

Page 96

Ile Leu Leu Ser Phe Phe Phe Phe Phe Phe Leu Ile Pro Ser Leu Thr 165 170 175

Leu Val Ser Gln Ala Arg Met Gln Trp Tyr Asn Leu Ser Ser Leu 180 185 190

<210> 185

<211> 76

<212> PRT

<213> Homo sapiens

<400> 185

Ile Leu Pro Ala His Leu Ile Pro Leu Gly Lys Leu Trp Cys Cys Leu 1 $$ 5 $$ 10 $$ 15

Ser Arg Thr Glu Ala Glu Gly Trp Leu Ser Pro Thr Gly Ser Tyr Ser 20 25 30

Leu Asn Ser Ala Ser Ser Pro Arg Leu Gly Glu Thr Thr Trp Gly His 35 40 45

Arg Val Phe Ala Arg Cys His Phe Ala Phe Gln Thr Arg Ser Trp Ser 50 55 60

Ser Gly Phe Arg Leu Gly Leu Trp Asn Ser Gly Ala 65 70 75

<210> 186

<211> 99

<212> PRT

<213> Homo sapiens

<400> 186

Cys Arg Ala His His Ser Leu Thr Ser Phe Val Ser Trp Phe Arg Tyr 1 5 10 15

Asp Leu Pro Tyr Pro Asp His Ser Ile Asn Cys Lys Leu Pro Val His 20 25 30

Ser Ser Leu Ser Tyr Asn Thr Phe Pro Phe Ser Gln Arg Tyr Cys His 35 40 45

Phe Val Ser Tyr Tyr Ile Thr Tyr Tyr Val Tyr Cys Leu Leu Arg Ile 50 60

Leu Cys Ser Leu Met Tyr Leu Lys Tyr Leu Gly Gln Cys Ser Val His 70 75 80

Val Thr Gly Val Gln Gln Arg Leu Leu Asn Glu Ile Phe Asp Asn Cys 85 90 95

Asp Arg Tyr

<210> 187

<211> 194

<212> PRT

<213> Homo sapiens

<400> 187

Ala Glu Gl
n Val Leu Val Ile Phe Ala Glu Gl
n Val Leu As
n Glu Cys Page 97 $\,$

10 15

Met Asn Lys Cys Met Asn Val Glu Met Lys Gly Asp Ala Asp Gly Asp 30 Gly Asp Ala Asp Gly Gly Gly Ser Ala Ser Gln Gly Phe Glu Phe His 80

Leu Gln Cys Leu Pro Ala Met Pro Pro Trp Val Thr Phe Ile Leu Leu 85 90 95

Pro Gly Lys Trp Gly Cys Trp Gln Pro Leu Pro Pro Gly Ile Thr Asp 100 105

Thr Ala Trp Ser Gly Cys Asp Pro Phe Gly Tyr Arg Arg Gly Trp Trp 115 120 125

Thr Ser Gln Val Gly Arg Ser Ser Leu Asp Glu Arg Pro Arg Thr Ile 130 $$ 135 $$ 140

His Arg Arg Ala Gln Glu Ser Leu Leu Ser Pro Ser Asn Ser Thr Glu 145 150 150 160

Pro Ala Val Asn Cys Trp Leu Leu Pro Val Thr Phe Pro Cys Pro Tyr 165 170 175

Phe His Ser Leu Glu Ala Ala Arg Thr Thr Ala Gly Trp Pro Trp Pro 180 185 190

Leu Pro

that the that had collect

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Floor St.

<210> 188 <211> 178

<212> PRT

<213> Homo sapiens

<400> 188

Ser Phe Ser Leu Gly Asn Phe Val Val Ala Ser Leu Tyr Ser Cys Cys 1 5 10

Phe Asn Asn Phe Val Leu Phe His Ser Phe Thr Val Thr Val Cys Val 20 25 30

Asp Ser Phe Ser Ser Ser Val Lys Ile Met Ser Pro Glu Ser Ser Phe 35 40 45

Ile Thr Leu Asp Arg Thr Arg Thr Leu Ser Ile Lys Ser Met Leu Phe 50 55 60

Val Ile Thr Glu Gln Phe Ser Ala Val Ile Ser Leu Ile Val Thr Phe 65 70 75 80

Leu Phe Ile Pro Phe Ser Leu Ser Lys Met Pro Leu Phe Val Tyr Trp 85 90 95

Ser His Arg Ser Glu Ile Cys Glu Phe Ala Ile His Val Ser Tyr Leu 100 105 110

Page 98

A. S.

1 Paris . 1.3 Phe Ala Asn Gly Phe His Val Ser Lys Ser Leu Phe Ser Ile Val Arg

Tyr Tyr Leu Tyr Cys Phe Val Gln Asn Ile Asn Leu Val Leu Phe Ile

Asp Tyr Ser Leu Val Leu Leu Leu Asn Phe Ile Gln Glu Cys Val Phe

Leu Ser Asp Tyr Phe Phe Leu Pro Asn Cys Ile Phe Leu Arg Gly Leu 170

Ile Ile

<210> 189 <211> 76

<212> PRT

<213> Homo sapiens

<400> 189

Pro Arg Glu Ala Lys Arg Leu Asp Ile His Ala Pro Leu Leu Ser Leu

Pro Asp Cys His Leu Leu Met Ala Ala Ser Val Ala Tyr Lys Ile Trp

Arg Pro Leu Gly Ser Val Ser Asn Cys Leu Asn Pro Leu Leu Tyr Phe

Leu Ser Arg Gly Ala Lys Phe Glu Ser Gly Ser Ser Arg Asn Gly Arg

Thr Ser Trp Val Ser Ile Gln Leu Gly Gly Arg Asp

<210> 190

<211> 189

<212> PRT

<213> Homo sapiens

<400> 190

Ser Leu Val Ile Leu Val Cys Tyr Ser Leu Met Val Arg Ser Leu Ile

Lys Pro Glu Glu Pro His Glu Val Gln Ala Thr Gln Pro Glu Pro Gly

Pro Ser Gly Thr Ile Leu Leu Val Cys Gly Leu Phe Thr Leu Cys Phe

Val Pro Phe His Ile Thr Arg Ser Phe Tyr Leu Thr Ile Cys Phe Leu

Leu Ser Gln Asp Cys Gln Leu Leu Met Ala Ala Ser Val Ala Tyr Lys

Ile Trp Arg Pro Leu Val Ser Val Ser Ser Cys Leu Asn Pro Val Leu

Tyr Phe Leu Ser Arg Gly Ala Lys Ile Glu Ser Gly Ser Ser Arg Asn 105

Page 99

- Gly Arg Thr Ser Trp Val Ser Ile Gln Leu Gly Gly Arg Asp Ala Gln
 115 120 125
- Gly Thr Asp Leu Gly Asn Ala Lys Val Lys Leu Gly Lys Asn Glu Leu 130 140
- Gln His His Gln Gln Leu Val Cys Thr Gln Met Ser Ala Gly Gly Arg 145 150 155 160
- Gly Ala Gln Asp Leu Leu Lys Val Ser Cys Cys Lys Gly His Phe Tyr 165 170 175
- Ile Asp Val Lys Val Asn Lys Ser Met Glu Arg Ala Thr
- <210> 191
- <211> 208
- <212> PRT
- <213> Homo sapiens
- <400> 191
- Ser His Ile Ser Pro Gly Thr Gly Cys Leu Ser Leu Pro Ala Ile Val 1 5 10 15
- Trp Ala Leu Ala Gly Ser Ser Pro Trp Glu Met Trp Ala Arg His Ser 20 25 30
- Asp Arg Ser Gln Ser Ala Gly Ala Gly Ala Phe Gly Leu Ser Ser Pro 35 40 45
- Met Glu Val Ser Glu Pro His Ser His Ser Tyr Arg Arg His Gln Asn 50 55 60
- Ser Leu Tyr Val Glu Pro His Lys Val Glu Thr Val Asn Ser Cys Arg 65 70 75 80
- Asn Leu Leu Trp Asn Thr Thr Val Phe Glu Ser Gly Ser Asp Leu Thr 85 90 95
- His Leu Asp Val Gly Asn Asn Asp Thr Glu Phe Ile Gly Leu Arg Leu 115 120 125
- His Leu Met Gly Thr Leu Glu Gln Cys Gln Thr Gln Thr Thr Asn Ala 130 135 140
- Gln Lys Leu Val Phe Ile Ile Ala Phe His Phe Asn Cys Gly Leu Leu 145 150 155 160
- Gly Leu Asn Cys Val Pro Ser Lys Arg Tyr Ile Gly Val Leu Thr Leu 165 170 175
- Ser Thr Ser Glu Cys Asp Cys Thr Trp Arg Leu Gly Leu Tyr Arg Asp 180 185 190
- Asn Arg Val Lys Met Glu Leu Gln Gly Trp Ser Leu Ile Gln Cys Asp 195 200 205
- <210> 192
- <211> 211
- <211> 211 <212> PRT

<213> Homo sapiens

<400> 192

Ile Leu Ser Ser Ser Leu Cys Leu Arg Pro Pro Ser Pro Glu Pro Ser 1 5 10 15

Glu Leu Ser Ala Ser Ser Leu Phe Ala Pro Pro Cys Cys Arg His Arg 20 25 30

Arg Phe Gly Ser Val Pro Ala Glu Val Gly Lys Asp Thr Trp Asn Ser 35 40 45

Gly Arg Pro Leu Cys Ser Pro Leu Ala Arg Ser Lys Ala Val Lys Asp 50 60

Thr Ala Ser Pro Gly Ser Cys Ser Ser Leu Asn Pro Thr Val Asp Leu 65 70 75 80

Val Gly Arg Leu Arg Ala Gln Ile Cys Arg Cys Ser Ile Val Ser Ser 85 90 95

Val Ser Cys Pro Leu Leu Pro Pro Gly Val Asp Ser Cys Thr Val His
100 105 110

Pro Thr Pro Ala Phe Pro Ser Phe Leu Ile Ser Pro Val Ile Phe Pro 115 120 125

Val Ala Leu Leu Cys Trp Cys Pro Val Arg Ser Cys Gly His Lys Arg 130 135 140

Leu His Gly Pro His Pro Gln Leu Gly Glu Ser Ser Pro Ser Trp Val 145 150 155 160

Leu Trp Thr Val Lys Lys Asp Gly His Val Gly Ser Val Glu His Glu 165 170 175

Val Val Gln Asp Leu Gly Gly His Arg Ser Cys Leu Pro Ala Ser Arg 180 185 190

Ala Leu Pro Pro Phe Gly Ser Leu Leu His Leu Gly Lys Arg Phe Val 195 200 205

Pro Thr Pro 210

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Asn Met Ser Tyr Ser Ser Arg Val Asn Ser Leu Leu Leu Phe Ser Phe 1 5 10 15

Asn Phe Ser Tyr Ile Ile Phe His Ile Asn Phe Arg Ile Ser Leu Val 20 25 30

Trp Gly Val Ile Gln Val Asn Leu Ile Lys Phe Gly Glu Gly Phe Thr 35 40

Ile His Leu Ile Asn Phe Gly Arg Val Val Met Leu Met Phe Ser His 50 55 60

Tyr Ile Leu Lys Cys Asp Ile Ser Phe His Leu Phe Val Leu Asp Gln 65 70 80

Ala Leu Val Ala Ser Ser Glu Asn Leu Leu Asn Ser Arg Asn Asn Phe 85 90 95

Phe His Leu Thr His Phe Leu Thr Ile Cys Phe Leu Pro Leu Val $100 \hspace{1cm} 105 \hspace{1cm} 110$

Leu Cys Leu Val Asn Tyr Phe Leu Leu Ile Ser Pro Leu Gl
n Ile Leu 115 120 125

Tyr Ala Ile Arg Lys Gly Val Thr Asp Leu Val Ile Glu Thr Gln Tyr 130 140

Thr Phe Val Gly Met Met Lys Ala Leu Gly Ile Phe Ser Tyr Tyr Val 145 150 150

His Leu Ile Ile Leu Lys Leu Ser Ser Tyr Val Glu Pro Ile His Lys 165 170 175

Ser Arg Ser Phe Asp Phe Lys Ser Cys Ile Phe Pro Tyr Phe Gln Tyr 180 185 190

Leu Ile Gly Glu Val Thr Cys Asn Ala Ile Val Leu Gln Phe Tyr Ile 195 200 205

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Met Thr Gly Asn Ala Val Val Leu Trp Leu Leu Gly Phe Arg Met Arg
1 5 10 15

Arg Asn Ala Phe Ser Ile Tyr Ile Phe Asn Leu Ser Met Ala Asp Phe 20 25 30

Leu Phe Leu Arg Ser His Ile Ile Arg Phe Pro Leu Ser Leu Ile Asn 35 40 45

Ile Leu His Pro Ile Phe Lys Ile Leu Ser Pro Val Met Met Phe Ser 50 60

Tyr Leu Ala Ser Leu Ser Phe Leu Ser Ala Met Ser Thr Glu Arg Cys 65 70 75 80

Leu Tyr Val Leu Trp Pro Ile Trp Arg Cys Arg Pro Arg Pro Tyr Thr 85 90 95

Cys Gln Arg Ser Cys Val Ser Cys Ser Gly Pro Cys Leu Cys Cys Gly
100 105 110

Ala Ser Trp Ser Gly Val Ser Val Thr Ser Cys Leu Val Val Leu Ile 115 120 125

Leu Phe Gly Val Lys His Gln Ile Ser Ser Gly Gly Phe Phe Tyr Val 130 135

Trp Leu Ser Val Val Pro Ala Trp Ser Cys Trp Ser Gly Ser Phe Val

Gly Pro Gly Arg Cys His Pro Gly Cys Thr Pro Ser Cys Ser Arg Trp
Page 102

175

Ser Ser Ser Phe Cys Gly Leu Pro Phe Gly Ile Arg Phe Phe Leu Phe

170

Ser Trp Asn His Val Asp Leu Glu Val Leu Tyr Cys His Val His Leu 200 205

Val Ser Ile Phe Leu 210

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His Thr His Thr His Thr His Thr His Thr His Thr Arg Thr

His Pro Ile Asn Gly Phe Pro Gly Gly Arg Ala Ser Val Pro Leu Thr

Ala Gly Pro Pro Gly Pro Ala Lys Gly Ala Lys Ser His Ser Asp Ile

Asn Ser Trp Phe Gln Ser Asn Lys Gln Ser Asn Val Arg Lys Val Ile

Arg Leu Lys Gly Phe Glu Gly Lys Ser His Gln Lys Val Lys Leu Asp

Pro Thr Ser Thr Ser Trp Met Ser Tyr Leu Ile Ser Leu Ala Ser Val

Phe Ser Pro Ile Lys Lys Pro Glu Asp Leu Pro His Gln Ala Val Leu 105

Lys Leu Asn Glu Leu Ile Pro Val Gln Ala Glu Asn Ser Ile Tyr Ser

Ile Ser Gln Leu Leu Leu Leu Leu Leu Leu Cys Thr Trp Leu Ser 130 135

Leu Phe Ser Phe Ile Asn Tyr Tyr Ser Leu His Leu Phe Ala Ala Thr 155

Trp Ser Ser Trp Asn Pro Phe Thr Ala Tyr Ser Arg Glu Thr Gly Glu

Gly Arg Cys His Leu His Ser His Trp Asp Ala Pro Ala Pro 185

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<213> Homo sapiens

<400> 196

Glu Asn Leu Phe Phe Lys Gly Lys Phe Val Ser Asn Thr Leu Pro His

Ser Phe Ile Arg Gln Cys Phe Leu Cys His Phe Ser Ala Arg Ile Leu Page 103

			20					25		001	JUUS.	1.51.	30		
Leu	Leu	Gly 35	Ile	Glu	Phe	Thr	Val 40	His	Ser	Ser	Val	Leu 45	Ser	Val	Leu
Gln	Lys 50	Tyr	Tyr	Leu	Phe	Pro 55	Ser	Asn	Leu	His	Gly 60	Phe	Arg	Trp	Lys
Ile 65	Cys	Cys	Gly	Leu	His 70	Tyr	Cys	Phe	Ser	Val 75	Arg	Asn	Val	Pro	Phe 80
Phe	Leu	Cys	Leu	Leu 85	Ser	Arg	Phe	Leu	Ile 90	Phe	Phe	Phe	His	Phe 95	Gln
Lys	Leu	Asn	Val 100	Phe	Gly	Cys	Ile	Leu 105	Phe	Arg	Val	Cys	Ser 110	Cys	Phe
Leu	Glu	Tyr 115	Leu	Gly	Leu	Cys	Ser 120	Ser	Ile	Leu	Ile	Trp 125	Glu	Gly	Ser
His	Tyr 130	Phe	Leu	Ile	Val	Phe 135	Ser	His	Ile						
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<213 <400 Ser 1 His Cys	3> H Asp Cys Ile Val 50	Ser Glu Phe 35 Leu	Pro Phe 20 Phe	Ile 5 His Ile	Thr Phe Leu	Cys Leu Leu 55	Val His 40 Pro	Asp 25 Thr	10 Val Phe Tyr	Ser Leu Cys	Thr Glu Gly 60	Ser Tyr 45 Phe	Arg 30 Phe Lys	15 Asp Ile Ala	Gly Ser Met
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Glu Ala Lys Thr Leu Val Glu Thr Leu Met Cys Phe Thr Ser Asn Ser 135

Leu Arg Val Pro Ile Ile Gln Phe Thr Ser Phe Cys Pro Thr Thr Leu

115 120 125

Ser Leu Ala Leu Asn Ile Pro Leu Phe Val His Pro Leu Ser Asp Ala 150 155

Ile Leu Leu Val Lys Gln Gln Thr Ser Thr His Arg Lys Leu Glu

<210> 198 <211> 177

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<213> Homo sapiens

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Ser Arg Lys Gly Arg His Trp Arg Gly Cys Leu Leu Thr Leu Leu Met 1 5 10 15

Leu Val Ala Val Val Cys Phe Ser Pro Tyr His Leu Asn Ile Lys 20 25 30

Gln Phe Met Ala Arg Gly Met Leu His Leu Pro Ser Cys Ala Glu Arg 35 40 45

Arg Ala Phe Leu Leu Ser Leu Gln Ala Thr Val Ala Leu Met Asn Met 50 60

Asn Cys Gly Ile Thr Pro Ser Phe Thr Ser Leu His Pro Pro Ile Thr 65 70 75 80

Gly Asn Gly Ser Trp Ala Phe Ser Ser Lys Gly Leu Pro Pro Pro 85 $90\,$

Pro Pro Pro Pro Gln Glu Lys Leu Gln Lys His Gln Val Ser 100 105 110

Pro Arg Pro Glu Val Leu Cys Ser Arg Ser Thr Trp Ser Asn Val Ser 115 120 125

Phe Ala Leu Leu Tyr Leu Gly Arg Gly Pro Ala Leu Gly Tyr Ser Tyr 130 140

Asn Leu Gly Lys Arg Phe Phe Lys Glu Lys Asn Thr Glu Glu Ile Gln 145 150 155 160

Asn Ala Gly Arg Gly Ser Arg Leu Ser Pro His Phe Gly Arg Pro $165 \hspace{1.5cm} 170 \hspace{1.5cm} 175$

Arg

<210> 199

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<212> PRT

<213> Homo sapiens

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Val Tyr Glu Cys Tyr Ile Phe Gly His Cys Trp Asp Val Ala Ser His 1 $$ 5 $$ 10 $$ 15

His Leu Thr Ser Leu Asn Leu Ser Gly Leu Thr Cys Glu Met Gly Ala 20 25 30

Leu Thr Phe Thr Cys Leu Gln Ala Cys Ser Gln Ile Arg Cys His Leu
35 40 45

Lys Asp Phe Ser Ser Pro Gly Asp Phe Lys Arg Leu Leu Arg Gly His 50 60

Phe Phe Ser Gly Cys Gly Arg Ser Met Ile Arg Val Ile Arg Met Gly 65 70 75 80

Leu Leu Glu Glu Arg Gly Gly Gln Arg Leu Leu Phe His Phe Met Ala $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$

Pro	Ser	Gly	Gln	Arg	Thr	Asp	Ser	Ala	Thr	Ala	Ala	Thr	Arg	Ala	Leu
			100					105					110		

Pro Gly Leu Trp Ser Gln Leu Ser Gln Gln Gln Phe Gln Lys Ala Lys 120

Gly Ser Glu Leu His Pro Ser Phe Leu Ala Asp Cys His Pro Ala Ser

Ser His Ser Pro Gln Gly Tyr Val Met Leu Ala Leu Lys Ala Ser Leu 150 155

Gly Arg Gly Cys Ile Cys His Pro Leu Pro Cys Lys Ile Phe Glu Val

Gln Arg Ala Leu Gln Ala Glu Pro His Pro Leu Leu His Ser Pro Ser 185

Val Gly Met His Ser Pro Ser Val Gly Met

<210> 200

<211> 175

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<213> Homo sapiens

<400> 200

Leu Pro Pro Pro Pro Ile Leu Val Pro Thr Val Val Thr Glu Glu Ile

Phe Ser Ser Ser Thr Ala Thr Leu Lys Gly Pro Ser Val Pro Phe Gly

Gly Leu Gly Ile Asp Leu Pro His Arg Ser Ser Leu Ala Pro Met His 4.0

Thr Phe Arg Asp Leu Arg Thr Gly Pro Leu Cys Leu Pro Leu Ser Leu

Leu Val Arg Lys Asp Trp Pro Ala Cys Leu His Pro Gln Gln Ser Ile

Ala Thr Ala Pro Ser Cys Ala Thr Glu Glu Leu Thr Asp Thr Thr His

Thr Val Tyr Ser Arg Arg Asn Pro Met Gly Pro Ile Ile Leu Cys Pro 105

Pro Trp Ile Lys Thr Lys Val Leu Tyr Ala Thr Asn Thr Thr Ala Ile

Ser Thr Gly Lys Ser Leu Ser Leu Gln Lys Pro Ile Gln Lys Pro Arg

Arg Ser Asn Cys His Thr Lys Tyr Thr Asp Thr Asn Leu Arg Thr Glu

Thr Glu Asn Lys Glu Thr Trp His Phe Leu Lys Glu His Asn Asn

<210> 201 <211> 178

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Leu Gly Phe Leu Leu Thr Asp Val Gln Ser Val Phe Gly Tyr Leu Gln

His Glu Thr His Tyr Cys Ser Ala Thr Ile Gly Arg His Trp Pro Ala

His Pro Leu Met Arg Cys Trp Asn Pro Phe Phe Ile Leu Lys Tyr Leu

Ile Asp Lys Asn Cys Val Cys Ser Arg Cys Asp Val Met Leu Arg Ser

Arg Tyr Ile Gln Val Tyr Leu Pro Gln Ser Asn Leu Thr Asn Leu Ser

Pro Pro Met Ile Thr Ile Met Leu Arg Gly Gly Ser Glu Asp Thr Lys

Asp Leu Leu Ser Tyr Gln Ile Ser Ser Gln Gln Tyr Ser Ile Ile Asn 105

Thr Val Thr Met Leu Cys Ile Arg Ser Pro Glu His Val Thr Glu Gly 120

Leu Tyr Leu Leu Thr Asn Ile Ser Pro Ala Leu His Glu Trp Met Val

Ser Ile Phe Gln Thr His Ser Glu Asp Phe Ala Trp Leu Ala Thr Ser 150 155

Ile Ser Pro Glu Lys Val Gln Lys Ser Arg Pro Ser His Arg Asn Ser 170

Asp Ala

<210> 202

<211> 196

<212> PRT

<212> Homo sapiens

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Tyr Gly Ala Leu Tyr Lys Tyr Lys Gln Gln Ser Leu Thr Phe Leu Ser

Leu Gln Leu Leu Thr Leu Ala Gly Ser Arg Ile Lys Met Pro Asn Ser

Thr Gln Lys Pro Trp Pro Val Ser Leu Pro Lys Met Glu Phe Arg Leu

Thr Ala Gly Asn Arg Asn Cys Ser Phe Lys Ala Ile Ala Trp Ala Met

Val Pro Ile Phe Val Asn Ile Gly Phe Cys Leu Asn Ser Val Ser Arg

Val Asp Tyr Ile Ile Cys Lys Val Cys Lys Met Lys Val Trp Gly Ser

Ser Ser Lys Tyr Lys Gln Lys Val Leu Leu Ser Val Ser Lys Tyr Lys 100 105 110

Met Phe Pro Leu Ser Val Ile Tyr Phe Ser Thr Cys Tyr Val Phe Gln 115 120 125

Phe Val Cys Phe Val Phe Pro Leu Leu Phe Tyr Val Leu Leu Cys Lys 130 135 140

Lys Ile Lys Asn Leu Asn Tyr His Asn Lys Phe Ser His Ser Phe Leu 145 150 155 160

Cys Cys Ala Val Ser Ile Asn Ala Asn Ile Lys Ala Phe Asn Leu Tyr \$165\$

Ile Glu Ser Gln Lys Leu His Asn Thr Tyr Phe Ile Val Cys Thr Cys
180 185 190

Met Tyr Ile Leu 195

<210> 203

<211> 212

<212> PRT

<213> Homo sapiens

<400> 203

Ser Gly Val Ile Asn Leu Leu Tyr Ile Cys Val Tyr Val Cys Ile Phe 1 5 10 15

Leu Pro Asn Arg Cys Asn Thr Lys Tyr Ser His Gly Val Ile Thr Phe 20 25 30

Ser Gln Leu Thr Leu His Pro Tyr Ile Ile Glu Glu Arg Ser Thr Ser 35 40 45

Ile Leu Phe Leu Leu Val Ile Ala Leu Met Ser Glu Tyr Lys Leu Asp 50 55 60

Ser Ser Val Ala Asn Asn Thr Arg Gln Ser Lys Asp Phe Ser Cys Cys 65 70 75 80

Arg His Ile Phe Leu Ile Tyr Trp Lys His Lys Cys Val Pro Pro Asn 85 90 95

Phe Ile Val Asp Arg Asn Met Lys Asn Phe Ile Lys Leu Lys Thr Gly $100 \hspace{1cm} 105 \hspace{1cm} 110$

Ser Leu Pro Asp Leu Pro Val Ile Leu Pro Thr Leu Gln Ile His Pro 115 120 125

Ile Val Pro Ala Ser Phe Thr Met Lys Lys Tyr Glu Thr Cys Leu Thr $130 \\ \hspace{1.5cm} 135 \\ \hspace{1.5cm} 140$

Trp Ser Leu Cys Leu Arg Glu Thr Cys Val Cys Leu Trp Asn Thr Leu 145 150 150 160

Thr Lys Ile Pro Ala Leu Val Asp Lys Thr Gly Phe Gln Ser Ser Leu 165 170 175

Asn Ser His Phe Val Leu Asn Lys Val Val Ser Lys Thr Arg Cys Ser

Lys Tyr Tyr Cys Ser Asp Ala Ile Ser Lys Thr Val Leu Ile Pro Cys Page 108

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Gly Arg Glu Asn
   210
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<210> 204 <211> 172 <212> PRT

<213> Homo sapiens

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Asn Lys Ile Val Phe Ile Phe Ser His Asp Cys Leu Trp Arg Lys Ile

200

Ser Lys Asn Leu Pro Lys Thr Asn Ala Ile Leu Ser Arg Val Lys Glu

Thr Arg Ser Ser Leu Phe Cys Thr Leu Tyr Phe Cys Ile Ser Val Leu

Phe Leu Tyr Gly Ser Asn Asp Gln Leu Glu Ile Lys Ile Leu Lys Gln

His Gln Lys His Lys Met Leu Ser Tyr Lys Ser Asn Lys Thr Tyr Thr

Asp Ser Val Pro Lys Thr Val Asn Val Tyr Leu Lys Asn Gln Arg Arg

Ala Glu Gln Arg Ala Thr Ser Cys Leu Leu Leu Glu Asn Ser Ile Glu

Leu Arg Tyr Lys Phe Pro Gln Ser Asp Leu Asp Ala Thr Gln Phe His 115 120

Ser Asn Pro Ser Arg His Phe Leu Leu Lys Ser Thr Ser Cys Phe Ile

His Thr Lys Ile His Lys Asn Lys Lys Ala Lys Ile Leu Leu Lys Glu

Asn Lys Phe Arg Arg Leu Leu Leu Ser Asp Phe Arg 165

<210> 205

<211> 313 <212> PRT

<213> Homo sapiens

<400> 205

Val Pro Lys Ile Phe Ser Phe Ser Ser Ser Phe Gln Asn Tyr Phe Leu 10

Ile Leu Val Lys His Thr Ser Ser Asn Ile Thr Tyr Tyr Leu Val Phe

Thr Tyr Ile Thr His Ser Leu Asn Lys Phe Val Glu Met Ile Ile Leu

Lys Ile Leu Val Phe Lys Phe Met Ser Ser Gln Lys Leu Leu Pro Arg

Ile Ser Ile Leu Asn Ile Trp Ile Asn Ile Leu Phe Tyr Thr Pro Tyr Page 109

AND AND AN AND AND AND

Asn Ile Leu Leu Ala Ile Ile Ile Phe Phe Arg Ile Cys Ser Thr Ser 90 Asn Phe Phe Asp Phe Leu Ile Leu Lys Arg Ile Ile Tyr Ala Asn Gln 105 Gln Cys Lys Asp Phe Ser Trp Phe Thr Arg Val Lys Leu Phe Ser Arg Met Val Gly Ser Phe Ala Tyr Ile Lys Leu Met Tyr Arg Ser Ala Ser 135 130 Ser His Ile Lys Val Gln Ser Leu Leu Lys Lys His Phe Ile Ser Asn 150 Gln Phe Val Phe Leu Tyr Thr Leu Lys Pro Phe Asn Cys Phe Tyr Phe Ser Ile Leu Thr Ser Ile Ser Cys Tyr Ser Gln Trp Pro Ala Ser Ser 185 Leu Ala Ile Arg Gln Leu Phe Val Tyr Leu Ala Lys Tyr Ile His Ala 200 Leu Lys Ile Pro Phe Pro Asn Ile Tyr Tyr Asp Phe Phe Lys Gly Phe 215 Ser Phe Val Thr Met Thr Leu Lys Ala Lys Val Ser Arg Cys Cys Ile Thr Val Gly Ser Thr Ile Met Tyr Gln Glu Gly Arg Glu Asn Gln Gly Thr Phe Leu Trp Glu Tyr Pro Ile Ile Cys Gln Ile Tyr Ser Asn Ser Leu Arg Thr Ile Thr Phe Val Phe Thr Val Phe Pro Met Gln Phe Leu Arg Phe Ile Phe Lys Asn Phe Leu Gly Glu Met Asp Tyr Ser Leu Leu 295 Ser Ala Val Ile His Asn Phe Tyr Phe 310 <210> 206 <211> 318 <212> PRT <213> Homo sapiens <400> 206 Pro Phe Tyr Tyr Ser Met Leu Val Pro Thr Ser Gly Leu Ser Thr Cys 10 Cys Ser Phe Cys Leu Glu Ser Ser Ser Pro Asp Leu Leu Arg Phe Pro

Leu Ser Ile Arg Val Ser Ala Val Ile His Pro Gln Arg Arg Ser Pro

Asp Pro Val Lys Pro Pro Ile Pro Gln Ser Pro Tyr Val Ser Thr Ser

65	Tyr Cys			Ser	Gln 70	His	Leu	Leu	Ile	Ser 75	Leu	Thr	Leu	His	Tyr 80
Met	_	Cys	m .							75					00
	Mot		Tyr	Met 85	Phe	Val	Ile	Leu	Ser 90	Ser	Gly	Pro	Cys	Asn 95	Val
Arg	1100	Ala	Gln 100	Tyr	Lys	Trp	Gln	Glu 105	Gly	Cys	Arg	Gly	Val 110	Asp	Lys
Ala	Glu	Ser 115	Gly	Trp	Gly	Ser	Trp 120	Arg	Asp	Gly	Gln	Gly 125	Pro	Glu	Leu
Arg	Arg 130	Trp	Tyr	Leu	Gln	Cys 135	Ala	Leu	Asn	Cys	Pro 140	Gly	Met	Ile	Ile
Ser 145	Ile	Ala	Ser	Phe	His 150	Ser	Gln	Arg	Суѕ	Pro 155	Gly	Tyr	Tyr	Ser	Cys 160
Ser	Val	Tyr	Arg	Ala 165	Trp	Ala	Val	Gly	Ile 170	Leu	Phe	Gln	Met	Gly 175	Cys
Glu	Ala	Cys	Gly 180	Trp	Phe	Ala	Gly	Ser 185	Asp	Met	Ile	Leu	Ala 190	Phe	Lys
Asp	His	Asp 195	Gln	Val	Leu	Glu	Thr 200	Leu	Phe	Trp	Leu	Leu 205	Pro	Thr	Pro
Pro	His 210	Thr	His	Pro	Thr	Leu 215	Leu	His	Cys	Pro	Phe 220	Ser	Leu	Leu	Trp
Gln 225	Leu	Phe	Leu	Phe	Tyr 230	Asn	Leu	Ile	Leu	Glu 235	Phe	Leu	Gln	Thr	Ser 240
Gly	Ser	Gln	Leu	Gly 245	Ala	Ile	Ser	Pro	Pro 250	Arg	Asp	Ile	Trp	Tyr 255	Phe
Ile	Trp	Arg	Tyr 260	Phe	Trp	Ser	Gln	Leu 265	Glu	Arg	Val	Leu	Ala 270	Ser	Ser
Gly	Arg	Pro 275	Gly	Arg	Leu	Leu	Thr 280	Ile	Leu	Gln	Ser	Thr 285	Glu	Gln	Pro
Tyr	Thr 290	Ile	Lys	Asn	Asp	Leu 295	Thr	Gln	Asn	Ala	Ser 300	Ser	Pro	Glu	Val
Lys 305	Lys	Pro	Cys	Thr	Arg 310	Leu	Ala	Pro	Ser	Asn 315	Arg	Asn	Ile		
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Thr	Cys	Cys	Ser 20	Phe	Cys	Leu	Glu	Ser 25	Ser	Ser	Pro	Asp	Leu 30	Leu	Arg
Phe	Pro	Leu 35	Ser	Ile	Arg	Val	Ser 40	Ala	Val	Ile	His	Pro 45	Gln	Arg	Arg

Ser Pro Asp Pro Val Lys Pro Pro Ile Pro Gln Ser Pro Tyr Val Ser

Thr Ser Leu Tyr Leu Ile Ser Gln His Leu Leu Ile Ser Leu Thr Leu

His Tyr Met Cys Cys Tyr Met Phe Val Ile Leu Ser Ser Gly Pro Cys

Asn Val Arg Met Ala Gln Tyr Lys Trp Gln Glu Gly Cys Arg Gly Val

Asp Lys Ala Glu Ser Gly Trp Gly Ser Trp Arg Asp Gly Gln Gly Pro

Glu Leu Arg Arg Trp Tyr Leu Gln Cys Ala Leu Asn Cys Pro Gly Met

Ile Ile Ser Ile Ala Ser Phe His Ser Gln Arg Cys Pro Gly Tyr Tyr

Ser Cys Ser Val Tyr Arg Ala Trp Ala Val Gly Ile Leu Phe Gln Met

Gly Cys Glu Ala Cys Gly Trp Phe Ala Gly Ser Asp Met Ile Leu Ala

Phe Lys Asp His Asp Gln Val Leu Glu Thr Leu Phe Trp Leu Leu Pro 200

Thr Pro Pro His Thr His Pro Thr Leu Leu His Cys Pro Phe Ser Leu

Leu Trp Gln Leu Phe Leu Phe Tyr Asn Leu Ile Leu Glu Phe Leu Gln

Thr Ser Gly Ser Gln Leu Gly Ala Ile Ser Pro Pro Arg Asp Ile Trp 245 250

Tyr Phe Ile Trp Arg Tyr Phe Trp Ser Gln Leu Glu Arg Val Leu Ala

Ser Ser Gly Arg Pro Gly Arg Leu Leu Thr Ile Leu Gln Ser Thr Glu

Gln Pro Tyr Thr Ile Lys Asn Asp Leu Thr Gln Asn Ala Ser Ser Pro

Glu Val Lys Lys Pro Cys Thr Arg Leu Ala Pro Ser Asn Arg

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<212> PRT

<213> Homo sapiens

<400> 208

Lys Leu Thr Leu Ala Ala Tyr Thr Leu Ile Gln Cys His Leu Pro Cys

Val Ile His Asn Ile Leu Tyr Glu Ser Tyr Phe Leu Cys Val Cys Val

Pro Phe Phe Glu Glu Tyr Asp Leu Ser Gln Phe Phe Cys Phe Ser Leu Page 112

35

		55					10					10			
Ser	Pro 50	Phe	Asn	Ile	Ser	Arg 55	Ala	Phe	Val	Val	Val 60	Thr	Gly	Glu	Thr
Thr 65	Tyr	Thr	Ser	Phe	Leu 70	Leu	Leu	Phe	Cys	Tyr 75	Leu	Gln	Phe	Cys	Met 80
Thr	Leu	Lys	Gln	Lys 85	Asn	Asn	Tyr	Leu	Thr 90	Ile	Ser	Phe	Val	Leu 95	Tyr
Ser	Gly	Phe	His 100	Ile	Gln	Ser	Pro	Phe 105	Ile	Met	Leu	Leu	Pro 110	Leu	Phe
Ser	Ser	Val 115	Phe	Glu	Asp	Gly	Lys 120	Ile	His	Gln	His	Pro 125	Lys	Tyr	Gln
Pro	Glu 130	Arg	Lys	Lys	Glu	Ser 135	Gly	Trp	Arg	Gln	Asp 140	Ser	Phe	Gln	Ser
Ile 145	Ser	Ser	Thr	Asp	His 150	Gly	Ala	Ala	Ala	Lys 155	Arg	His	Ser	Lys	Arg 160
Val	Glu	Arg	Gly	Lys 165	Thr	Ser	Ser	Leu	Arg 170	Cys	Leu	Pro	Phe	Lys 175	Phe
Thr	Ile	Ile	Ile 180	Arg	Met	Leu	Leu	Glu 185	Glu	Glu	Gln	Gly	Gln 190	Gly	His
Phe	Cys	Asn 195	Met	Thr	Gln	Lys	Asn 200	Ile	Asp	Leu	Lys	Phe 205	Asp	Thr	Tyr
Glu	Leu 210	Ser	Lys	Cys	Arg	Glu 215	Lys	Leu	Pro	Pro	Cys 220	Cys	Thr	Cys	Met
Cys 225	Ala	Ile	His	Phe	Ile 230	Leu	Ile	Lys	Val	Cys 235	Lys	His	Glu	Met	Gln 240
Gly	Thr	Asp	His	Leu 245	Phe	Met	Arg	Met	Gln 250	His	Ser	Ser	Glu	Lys 255	Val
Tyr	Leu	Pro	Lys 260	Thr	Glu	Tyr	Met	Phe 265	Ile	Leu	Lys	Phe	Phe 270	Phe	Leu
Phe	Leu	Phe 275	Leu	Ile	Val	Ile	Lys 280	Tyr	Lys	His	Lys	Phe 285	Thr	Ile	Leu
Ile	Ile 290	Phe	Lys	Tyr	Thr	Val 295	Gln	Tyr	Val	His	Ser 300	His	Tyr	Cys	Ala
Thr 305	Asn	Phe	Gln	Asn	Ser 310	Phe	Tyr	Leu	Ala	Lys 315	Met	Lys	Leu	Tyr	Thr 320
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Gln 1	Pro	Phe	Ser	Met 5	His	Ser	Leu	Glu	Glu 10	Lys	Phe	Phe	Phe	Phe 15	Leu

Asn His Tyr Ser Ala Thr Ser Ile Ser Leu Glu Phe Leu Ser Ser Glu 20 25 30

00100US1.ST25 Thr Leu Val Gln Val Ser Trp Gly Ile Arg Ile Val Cys Val Trp Ile Thr Lys Tyr Tyr Arg Leu Arg Gly Glu Glu Thr Leu Trp Ser Phe Arg Pro Thr Leu Ile Cys Leu Asp Leu Phe Cys Phe Lys Glu Ser His Leu Gln Arg Thr Ala Ser Asp Ser Pro Cys Ser Val Phe Ser Gln Glu Cys Ser Leu His Gln Pro Gln Glu Val Leu Gln Lys Glu Val Phe His Val Gln Ile Thr Leu Arg Ser Asn Ser His His Ile Asp Phe Glu Tyr Ser 120 Cys Arg Lys Thr Cys Leu Tyr Gln Leu Gly Val Ser Pro Asn Leu Phe Gly His Gly Asn Ser Phe Ser Lys Lys Thr Cys Phe Ser Ile Ser Phe His Arg Lys Leu Thr Val Val Cys Val Phe Phe Gln Ile Ile His Ile 170 Tyr Ser Lys Leu Lys Leu His Trp Leu Phe Gly Phe Ile Asn Pro Leu Thr Ser Val Leu Phe Phe Ser Thr Thr Cys Cys Leu Ala Thr Ser Ala Cys Phe Val Trp Leu Asp Phe Leu Val Leu Ser Ile Gly Leu Arg Phe Tyr Ile Leu Ser Cys Trp Asn His Pro Thr Ser Pro Ala Trp Leu Phe 230 235 Gly Ser Arg Leu Ser His Leu Val His Ser Ser Ala Val Asp Leu Tyr Tyr Ser Leu Met Ser Ala Tyr Ser Leu His Leu Tyr Ser Phe Cys Leu 265 Glu Met Met Ser Arg Thr Gly Gln Gly Trp Tyr His Ser Ile Asn His His Pro Leu Ile Leu Thr Val Asn Leu Pro Asn Lys Ile Phe Gln Lys Arg Val Ser Asn Asn Pro Cys Leu Pro Leu Trp 305 310 <210> 210 <211> 327

<212> PRT

<213> Homo sapiens

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Ala	Ser	Glu	Phe	Ser	Gln	His	Arg	Lys	Arg	Gly	Leu	Arg	Thr	Ile	Gln
			20					25					30		

Pro Val His Ser Arg Glu Ser Leu Ser Val Ser Gln Arg Leu Met Gly

Cys Leu Trp Cys Arg Val Thr Pro Ala Ser Pro Cys Gly Gly Cys Ala

Gly Gly Ala Arg Pro Pro Pro Cys Ala Leu Ser Leu Ala Gln Gly Gln

His Thr Ala His Pro Leu Phe Phe Leu Pro Phe Pro Leu Ala Gln Pro

Leu Val Val Gly Val Thr Arg Gly Ala Glu Arg Ser Trp Arg Ser Arg

Ala Cys Pro Gly Pro Val Arg Glu Gly Gly Arg Gly Gln Gln His Pro

Trp Arg Arg Glu Asp Tyr Ile Ile Phe Ile Tyr His Met Pro Lys Ile 135

Ala Leu Leu Arg Ala Phe Asp Ile His Pro Lys Ile Phe Lys His Tyr

Gly Ser Met Ser Gly Cys Ile Ser Asn Met Lys Val Glu Ala Ser Cys

Pro Ala Pro Ser Pro Leu Trp Glu Asn Phe Val His Val Leu Ser Gln 185

Leu Phe Gly Lys Gly Gly Pro Ser His Cys Pro Leu Gly Gly Phe Asp

Val His Cys Val Gly Arg Ser Leu Pro Ser Ile Leu Phe Tyr Phe Cys

Arg Ile Ser Ala Gln Ser Gly Ser Ala Trp Gln Phe Ser Cys Ser Ala

Arg Glu Val Leu Cys Pro Gly Leu Cys Asp Phe Arg Arg Glu Gly

Ser Cys Arg Pro Tyr Leu Gln Trp Leu Pro Pro Gly Ile Pro Val Cys

Ser Leu Cys Thr Val Gln Arg Arg Ser Gly Ser Trp Trp Arg Asp Gly

Asp Pro Arg Thr Met Ala Ser Thr Lys Ala Gly Gly Ala Cys Asp Arg

Arg Trp Thr Met Thr Gln Val Pro Ala Arg Tyr Gly Ser Gly Leu Cys

Arg Glu Gly Ala His Pro Gly 325

<210> 211

<211> <212> 327

PRT

<213> Homo sapiens

Ser Leu Pro Gly Pro Pro Ala Thr Val Cys Pro Val Pro Ala Ser Glu 20 25 30

Phe Ser Gln His Arg Lys Arg Gly Leu Arg Thr Ile Gln Pro Val His $35 \ \ 40 \ \ 45$

Ser Arg Glu Ser Leu Ser Val Ser Gln Arg Leu Met Gly Cys Leu Trp 50 55 60

Arg Pro Pro Pro Cys Ala Leu Ser Leu Ala Gln Gly Gln His Thr Ala 85 90 95

His Pro Leu Phe Phe Leu Pro Phe Pro Leu Ala Gln Pro Leu Val Val 100 105 110

Gly Val Thr Arg Gly Ala Glu Arg Ser Trp Arg Ser Arg Ala Cys Pro 115 120 125

Gly Pro Val Arg Glu Gly Gly Arg Gly Gln Gln His Pro Trp Arg Arg 130 135 140

Arg Ala Phe Asp Ile His Pro Lys Ile Phe Lys His Tyr Gly Ser Met $165 \hspace{1.5cm} 170 \hspace{1.5cm} 175$

Ser Gly Cys Ile Ser Asn Met Lys Val Glu Ala Ser Cys Pro Ala Pro 180 185 190

Ser Pro Leu Trp Glu Asn Phe Val His Val Leu Ser Gln Leu Phe Gly 195 200 205

Lys Gly Gly Pro Ser His Cys Pro Leu Gly Gly Phe Asp Val His Cys 210 220

Val Gly Arg Ser Leu Pro Ser Ile Leu Phe Tyr Phe Cys Arg Ile Ser 225 230 235 240

Ala Gln Ser Gly Ser Ala Trp Gln Phe Ser Cys Ser Ala Arg Glu Val $245 \hspace{1.5cm} 250 \hspace{1.5cm} 255$

Leu Cys Pro Gly Leu Cys Asp Phe Arg Arg Arg Glu Gly Ser Cys Arg 260 265 270

Pro Tyr Leu Gln Trp Leu Pro Pro Gly Ile Pro Val Cys Ser Leu Cys 275 280 285

Thr Val Gln Arg Arg Ser Gly Ser Trp Trp Arg Asp Gly Asp Pro Arg

Thr Met Ala Ser Thr Lys Ala Gly Gly Ala Cys Asp Arg Arg Trp Thr 305 310 315 320

Met Thr Gln Val Pro Ala Arg

社会

<210> 212 <211> 310

<212> PRT

<213> Homo sapiens

<400> 212

His Glu Leu Ser Leu Pro Cys Gly Gln Ser Pro Val Ile Lys Lys Glu
1 5 10 15

His Thr Pro Ser Leu Thr Glu Thr Ser Leu Asn Lys Lys Asn Ala His 20 25 30

Gln Arg Asn Ile Glu Phe Lys Tyr Leu Glu Gln Met Ser Glu Ile Ser 35 40 45

His Lys Asn Leu Asn Arg Asn Trp Pro Ser Lys Ser Trp Glu Phe Gly 50 55 60

Asp Ala Asn Phe Ile Leu Ser Ile Leu Glu Gln Ser Lys Ile Asn Thr 65 70 75 80

Thr His Phe Ser Leu Arg Lys Ser Ala Tyr Leu Phe Asp Val Pro Ser 85 90 95

Gly Leu Glu Ile Pro Asn Lys Thr Leu Thr Leu Phe Ile Leu His His 100 105 110

Asn Ile Thr Val Asn Lys Asn Asn Leu Asn Leu Cys Ser Asn Phe Pro 115 120 125

Leu Trp Thr Gln Arg Lys Thr Gln Glu Lys Met Val Glu Cys Val Leu 130 135 140

Asn Lys Val His Tyr Leu Tyr Gln Lys Tyr Ala Val Ile Ser Thr Ser 145 $$ 150 $$ 155 $$ 160

Thr Pro Lys Cys Leu Phe Asn Phe Ala Met Met Tyr Lys Ile Leu Val 165 170 175

Thr Cys Gln Ser Ile Asn Phe Ser Gln Leu Ile Leu Lys Ala Glu Asp 180 185 190

Ser His His Phe Val Cys Phe Ser Val Asn Met Ile Val Phe Val Arg 195 200 205

Lys His Ile Tyr Pro Glu Ser Tyr Gly Pro Met Phe Leu Thr Phe Cys $210 \\ \hspace{1.5cm} 215 \\ \hspace{1.5cm} 220 \\ \hspace{1.5cm}$

Pro Arg Ser Val Cys Val Ala Ser Cys Val Cys Met Asp Val Asp Asn 225 230 235 240

Lys Leu Asp Ser Tyr Gln Glu Ser Lys Ile Lys Leu Leu Ser Cys Lys 245 250 255

Lys Phe Val Lys Tyr Val Asp Leu Ser Cys Leu Lys Leu Arg His Pro $260 \hspace{1cm} 265 \hspace{1cm} 270 \hspace{1cm}$

Gly His Ser Leu Trp Arg Glu Asn Ser Pro Pro Leu His Val Asn Leu 275 280 285

Trp Val Gly Thr Gly Val Gln Gly Phe Arg Val Gly Leu Leu Pro 290 295 300

Gly Met Ile Gln Lys Ile

<210>	21
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<212> PRT

<213> Homo sapiens

<400> 213

Lys Ala Asp Lys Ile Thr Phe Leu Glu Ser Ser Ile Tyr Ser Leu Ile

310

Val Phe Leu Tyr Ile Thr Leu Ser Gln Leu Trp Ser Lys Glu His Ser

Thr Glu Glu Gly Gly Ser Leu Ile Phe Pro His Leu Val Thr Pro Met 40

Leu Glu Leu His Glu Ile Asp Asn Tyr Tyr Tyr Ile Val Ile Ser Phe

His Val Leu Ser Phe Ser Ser Ser Leu Leu Phe Phe Lys Ser Arg

Lys Gln Asn Gly His Gln Leu His Glu His Cys Ser Lys Lys Ile Thr

Val Arg Pro Asn Leu Asn Cys Trp Leu Pro Gly Arg Ala Ile Leu Ile

Ala Tyr Lys Asp Gln Ile Lys Tyr Gln Ser Gln Val Val Arg Cys Pro

Cys Thr Glu His Asn Ile Val Tyr Lys Asp Val Glu Leu Leu Leu

Leu Trp Phe Tyr Thr Val Ala His Asp Lys Glu Leu Ile Phe Tyr Leu 155

Asn Glu Val Leu Phe Tyr Ile Thr Tyr Phe Met Phe Phe Pro Gln Glu

Ser Phe Asn Leu Leu Arg Leu Arg Asp Ser Phe Lys Cys Phe Asp Pro

His Thr Leu Phe Ala Gly Cys Arg Arg Met Cys Met Ile Leu Thr Phe

Thr Ala Asn Leu Phe Phe Trp Met Gly Tyr Cys Asn Phe Leu Leu Glu

Asp His Thr Ser Ser Ser Met Phe Arg Arg Gly Leu His Leu Trp Phe 230 235

His Gly Trp Thr Leu Asp Pro Leu Trp Leu Ser Lys Ile Leu His Gln

Cys Asn Ser Phe Val Asn Gly Tyr Met Ile Gln Ala Gly Pro Ile Arg 265

Ala Leu Pro Arg Val Leu Leu Glu Leu Leu Gly Arg Glu Ile Leu Ser

Ser Thr Lys Val Ile Phe Trp Arg Asn His Asp Gln Glu Ser Gln Cys 295 300

Page 118

And the trade of trade of the t American de la constante de la Think think think it Met Glu Asn Lys Ser Arg Glu Lys Lys 305 310

<210> 214

<211> 320

<212> PRT <213> Homo sapiens

<400> 214

Met His His Val Phe Ile Leu Trp Pro Leu Ile Asp Ser Trp Asp Val 1 5 10 15

Lys Glu Leu Ile Leu Tyr Thr Tyr Ala Asn Leu Lys Pro Ser Ile Ile 20 25 30

Ser Leu Thr Ser Pro Val Ser Ser Leu Cys Leu Cys Tyr Gln Gln Val 35 40 45

Asn Phe Ser Val Leu Pro His His Lys Pro Gln Leu Pro Leu His Met 50 55 60

Phe Pro Lys Leu Val Ala Asn Ser Val Phe Pro Gly Glu Cys Ile Lys 65 70 75 80

Tyr Pro Gly Ile His Cys Tyr Thr Val Ser Asn Gly Ser Ser Phe Ser 85 90 95

Leu Leu Trp Arg Arg Thr Pro Glu Glu Ser Thr Ser Pro Gly Pro Ala 100 105 110

Ala Ser Cys Met Gly Asn Leu Leu Leu Leu Leu Gly Phe Thr Leu 115 120 125

His Ile Leu Ser Leu Arg Lys His Thr Lys Ser Phe His Val Phe Val 130 $$ 135 $$ $$ 140

Pro Val Pro Met Pro Leu Leu Pro Gly Ile Pro Phe Phe Tyr Ser Tyr 145 150 150 155 160

Ser Leu Asn Lys Leu Phe Tyr Ser Phe Ser Ser Gly Pro Leu Pro Leu 165 170 175

Ile Gln Leu Arg Asn Asn Tyr Cys Leu Ser Pro Ser Lys Leu Ile Phe 180 185 190

Cys Leu Leu Phe Ser His His Thr Leu Pro Phe Thr Ser Val Ala Tyr 195 200 205

His Phe Phe Cys Tyr Leu Thr Asn Ala Ser Val Phe Ile His Ser Pro 210 215 220

Pro Arg Leu Tyr Ser Ser Trp Val Gln Ser Ile Ser His Ser Phe Leu 225 230 235 240

Cys Tyr Leu Cys Leu Ser Gln Cys Trp Leu Gln Ser Arg Tyr Phe Arg 245 250 255

Asp Ala Ile Ile Arg Val Arg Val Arg Ile Gly Glu Asp 260 265 270

Ser Met Val Leu Arg Cys His Ala Ser Cys Lys Glu Asn Met Lys Gly 275 280 285

His Phe Phe Phe Leu Gln Leu His Gly Leu Leu Gln Ser Leu Cys Leu 290 295 300

Leu Gly Leu Glu Leu Pro Ala Ile Ser Val Phe Val Arg Leu Leu Ile 305 310 315 320

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<213> Homo sapiens

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Pro Val Asn Ala Lys Asp Ile Leu Phe Gly Leu Glu Ile Lys Leu 1 5 10 15

Met Pro Ile Trp Pro Tyr Ala Leu Arg Thr Leu Leu His Asn Lys Ile 20 25 30

Ala Val Arg Val Thr Lys Trp Lys Met Asn Asn Met Tyr Arg Glu Arg 35 40 45

Ile Gln Lys Arg Asn Leu Tyr Phe Ile Phe Ser Lys Leu Pro Gln Ile 50 55 60

Cys Leu Arg Lys Leu Tyr Asp Leu Val Asn Arg Ile Leu Lys Thr Leu 65 70 75 80

Ile Tyr Lys Ser Gln Val Trp Ala Leu Val Thr Ser Leu Asn Asp Trp 85 90 95

Leu Ala Asp Asn Leu Ser Gly Ser Ser Tyr Leu Glu Ile Glu Asn Thr $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$

Ser Leu Pro Phe Tyr Asn Ser Pro Gln Leu Phe Gln His Thr Gln Cys 115 120 125

Asp Lys Lys Pro Ser Gln Ala His Phe Ser Asn Asn Glu Phe Val Gly 130 135

Ser Phe Lys Cys Gln Gly Gln Gln Val Arg Ala Gly Ser Glu Ala Asp 145 155 160

Ile Phe Gly Glu His Gly Leu Ala Phe Ser Phe Leu Gly Thr Phe Val 165 170 175

Leu Trp Met Glu Ser Ile Leu Gly Gln Ala Glu Val Leu Leu Ser Trp 180 185 190

Trp Gln Asp Gly Tyr Ala Arg Gln Pro Ser Cys Leu Gln Arg Ala Cys 195 200 205

Leu Val Arg Ser Phe Gly Ile Ser Ser Asp Leu Met Asn Leu Gly Leu 210 215 220

Met Phe Ile Pro Gly Tyr Ile Ser Phe Ala Gln Val Asn Gly Tyr Val 225 230 235 240

Asp Cys His Thr Trp Val Ser Val Thr Thr Pro Gly Phe Ser Asp Gly 245 250 255

Val Ser Pro Lys Gly Pro Thr Arg Val Glu Glu Ser Gly Ser Trp Lys

Glu Ser Gln Gly Lys Gly Lys Gly Thr Asn Ala Arg Trp Ala Val Asn Page 120

		275					280			001	00US	1.ST 285	25		
Gly	Ser 290	Cys	Pro	Asn	Phe	Met 295	Pro	Glu	Pro	Leu	Lys 300	Gly	Ile	Phe	Thr
Leu 305	Thr	Val	Gly	Ile	Asn 310	Ile	Gly	Arg	Gly	Asp 315	Ala	Trp			
<210 <211 <212 <213	L> 3 2> E	216 319 PRT Homo	sapi	iens											
<400)> 2	216													
Arg 1	Lys	Lys	Asp	Asp 5	Ser	Ile	His	Val	Arg 10	Arg	Asn	Ser	Ala	Arg 15	Met
Gln	Lys	His	Lys 20	Tyr	Glu	Lys	Arg	Val 25	Tyr	Cys	Phe	His	Asn 30	Lys	Thr
Lys	Thr	Arg 35	Lys	Glu	Ile	Ala	Cys 40	Gly	Lys	Glu	Lys	Gln 45	Ser	Lys	Lys
Arg	Lys 50	Thr	Asn	Leu	His	Val 55	Ala	Asn	Leu	Phe	Val 60	Thr	Phe	Gln	Ile
His 65	Met	Ser	Cys	Ala	Met 70	Ile	Thr	Arg	Gly	Phe 75	Pro	Asp	Lys	Phe	Cys 80
Phe	Ser	Ile	Ile	Phe 85	Leu	Gln	Leu	Tyr	Lys 90	His	Gly	Phe	Tyr	Ser 95	Asp
Asn	Leu	Ser	Phe 100	Asp	Ile	Phe	Phe	Ile 105	Asp	Tyr	Gln	Arg	Ile 110	Leu	Glu
Thr	Asn	Gln 115	Ala	Gln	Tyr	Phe	Asn 120	Phe	Gln	Phe	Ser	Leu 125	Pro	Val	Ile
Leu	Leu 130	Pro	His	Thr	Ala	Ser 135	Thr	Pro	Ser	Trp	Tyr 140	Gln	Leu	Lys	Lys
Tyr 145	Tyr	Val	Arg	Met	Thr 150	Ser	Val	Thr	Leu	Val 155	Leu	Phe	Ile	Leu	Asn 160
His	Ser	Glu	Pro	Tyr 165	His	Cys	Val	Leu	Asn 170	Leu	His	Leu	Thr	Asp 175	Pro
Tvr	Leu	Cvs	Ser	Ser	Ser	Ser	Ala	Leu	Asp	Leu	Cvs	Phe	Gln	Ala	Leu

ATTENDED ATTENDED OF THE SERVICE ATTENDED ATTENDED OF THE HEAD OF

Tyr Leu Cys Ser Ser Ser Ser Ala Leu Asp Leu Cys Phe Gln Ala Leu 180 185 190

Arg Phe Tyr Asn Val Ile Asn Pro Leu Ser Leu Ile Phe Ser Ser Pro 195 200 205

Leu Thr Cys Met Cys Val Glu Ser Val Tyr Met Leu Glu Asn Tyr Thr 210 215 220

Thr Phe Thr Arg Phe Ile Leu Leu Val Tyr Leu Thr Leu Thr His Phe 225 230 235 240

Tyr Ser Leu Gly His Tyr Leu Cys Met Ala Tyr Ala Glu Val Gly Ser 245 250

Gly His Tyr Lys His Gln Glu Thr Ile Ser Ile Thr Pro Cys Ile His $260 \hspace{1.5cm} 265 \hspace{1.5cm} 270 \hspace{1.5cm}$

Val His Val Val Leu Lys Tyr Asn Val Lys Tyr Arg Glu Val Thr Leu
275 280 285

Gly Leu Asn Ser Gly Val Ser Ala Arg Leu Gly Leu Ile Thr Thr Leu 290 295 300

Leu Leu Ala Asn Tyr Ala Ser Leu Asn Pro Cys Ala Ser Lys Leu 305 315

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<211> 313

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<213> Homo sapiens

<400> 217

Trp Pro Gln Ile Ser Phe Pro Pro Tyr Val Pro Leu Val Ser Thr Asn 1 5 10 15

Leu Phe Leu Pro Tyr Trp Ser Gly Gln Cys Pro Pro Asp Thr Ala Val 20 25 30

Leu Pro Thr Gly Leu Leu Ser Ser Phe Leu Ser Val Ile Ile Leu Ala 35 40 45

Cys Leu Trp Leu Lys Ala His Leu Cys Gly Pro Gln Arg Asn Tyr Leu 50 60

Pro Leu His Ser Ser Ser Trp His Leu Ser Leu Met Asp Ser Tyr Tyr 65 70 75 80

Pro Leu Leu Leu Cys Ala Phe Met His Ile Ile Leu Ala Pro Pro 85 90 95

Asp Gln Leu Ser Leu Gly Gln Gly Phe Asp Leu Val Pro Ile Tyr Ser 100 105 110

Ser Pro Arg Ala Ser Leu Leu His Thr Val Gly Trp Gly Lys Ile Phe 115 \$120 \$125

Lys Ile Ser Leu Ser Cys Ser Ile Trp Asn Glu Leu Val Ala Gly Asn 145 150 150

Gln Leu Glu Val Ser Ser Glu Gly Asn Thr Trp Thr Tyr Pro Leu Leu 165 170 175

Leu Asn His Trp Cys Cys Tyr Leu Gln Glu Gly Leu Gly Gln Ile Cys $195 \hspace{1.5cm} 200 \hspace{1.5cm} 205 \hspace{1.5cm}$

Glu Glu Thr Ser Met Tyr Thr His Pro Tyr His Leu Lys Asn Lys Phe 210 215 220

Val Cys Val Pro Leu Met Lys Tyr Glu Glu Arg Ser His Ser Phe Gln 225 230 235 240

Ser Thr Gln Ala Leu Cys Leu Gly Leu Leu Ala Thr His Ala Lys Ile 245 250 255

Leu Tyr Gln His Phe Val Lys Pro Thr Ile Leu Thr Val Pro Ala Leu 260 265 270

Gln Pro Val Ile Asp Ser Asn Phe Asn Ser Pro Leu Val Ala Ile Ser 275 280 285

Asp Ala Gln Cys Leu Cys Leu Pro Leu Cys Ile Pro Ser Pro Ala 290 295 300

Leu Asn Ser Ala Gly Cys Ile Gln Glu 305

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<212> PRT

<213> Homo sapiens

<400> 218

Thr Cys Ser Ser Thr Asp Ser Lys Val Ile Leu Lys Ser Gln Leu Asn 1 5 10 15

Val Ile Thr Arg Cys Arg Asp Ser Arg Tyr Val Tyr Ser Glu Arg Asn 20 25 30

Cys Ser Pro Ser Val Ile Leu Ile Lys Val Lys Ser Phe Gln As
n Ala 35 40 45

Met Val Gly Gln Thr Asn Arg His Ser His Ser Lys Arg Glu Lys Glu 50 60

Gly Ile Leu Gl
n Gl
n Gl
n Ser Lys Arg Ile Leu Arg Leu Gl
n As
n 65 7075 80

Asn Leu Leu Met Pro His Leu Pro Ile Phe Gln Ala His Leu Gly 85 90 95

Arg Arg Trp Ala Pro Lys Ala Leu Gly Val Pro Val Pro Ala His Met 100 105 110

Thr Ala Leu Thr Tyr Ser His Met Pro Gly Trp Lys Cys Pro Leu Val 115 120 125

Ala Leu Leu Val Tyr Gly Gln Arg Val Gly Leu Leu Leu Cys Gln 130 135 140

Ala Gln Pro Trp Arg Leu Phe Val Val Ala Pro Pro Leu Cys Gln Phe 145 150150155160

Phe Ala Ala Ser Arg Leu Ser Arg Ala Ser Phe Glu Ile Cys Val Glu 165 170 175

Ser Ala Phe Pro Leu Trp Tyr Cys Thr Val Cys Pro Gly Gly Asp Asp 180 185 190

Thr Arg Thr Leu Pro Thr Phe Ile Ile Cys Ala Leu Gln Lys Gly Gly 195 200 205

His Trp Ser Pro His His Thr Trp Thr Leu Trp Ser His Ala Trp Asn 210 215 220

Asp Ala Val Leu Cys Gln Lys Ala Gly Ser Arg Asp Glu Val Ala Gly 225 230 235 240

Arg Lys Cys Ala Pro Val Gly Ile Leu Gly Pro Ser Phe Asp Leu Val

255

Leu Ser Pro Arg Pro Trp His Ala Gly Pro Val Met Gly Ala Ala Ala 260 265 270

Val Met Met Ser Glu Met Leu Leu Val Gly Val Ile Pro Pro Leu Pro 275 280 285

Lys Ala Pro Gly Phe Cys Ser Ser Met Leu Ile Ser Asn Gly Cys Trp 290 295 300

Ala Thr Ser Leu Val Phe Ser Pro Lys 305 310

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<212> PRT

<213> Homo sapiens

<400> 219

His Arg Asn Ile Leu Gln Asn Phe Asn Ile Thr Val Leu Asn Ser Val 1 5 10 15

Lys Thr Lys Asp Asn Pro Leu His Pro Asn Met Thr Ala Phe Asn Ile 20 25 30

Leu Leu Tyr Phe Ser Leu Phe Ala Met Tyr Ile Ile Leu Gln Ser Cys 35 40 45

Asn His Thr Gln Tyr Met Ile Leu Ser Cys Phe Pro Thr Tyr His Tyr 50 60

Arg Tyr Phe Tyr Cys Tyr Ile Val Phe Met Val Val Ile Val Asn Ser 65 70 75 80

Tyr Ala Val Ile Val His Ile Glu Val Leu Tyr Leu Leu Ser Tyr Pro 85 90 95

Ile Ile Phe Lys Gln Phe Leu Ile Ser Phe Tyr Asn Lys His Gly His 100 $$105\$

Ile Ser Asp Arg Gly Val Leu Phe His Ile Leu Thr Tyr Phe Ser His 115 $$ 120 $$ 125

Ser Val Thr Ile Thr Pro Lys Asn Thr Asn Phe Leu Ser Leu Asp Val 130 135 140

Tyr Phe Gln Lys Ile Phe Lys Arg Cys Ile Asn Leu Leu Cys Ser Trp 145 150 155 160

Cys Lys Arg Pro Phe Cys His Cys Phe Leu Glu Ser Arg Ala Ser Lys 165 170 175

Ser Arg Asp Met Trp Leu Gly Gly Arg Asn Pro Ala Trp Gly Arg His

Ser Val Lys Asn Ser Ser Ser His Trp Tyr Thr Gly Phe Ile Phe Leu 195 200 205

Cys Phe Leu Gln Thr Glu Gln Leu Ile Thr Leu Trp Val Leu Phe Val 210 215 220

Phe Thr Ile Val Gly Asn Ser Val Val Leu Phe Ser Thr Trp Arg Arg 225 230 235 240

Lys Lys Lys Ser Arg Met Thr Phe Phe Val Thr Gln Leu Ala Ile Thr 245 250 255

Gly Lys Leu Cys Lys Glu Ala Gly Ser Tyr Met Ser Pro Tyr Gly Phe 260 265 270

Leu Leu Met Asn Phe Ile Lys Lys Lys Met Arg Ile Gly Gln 275 280 285

Phe Gly Asn Asn Phe Lys Asn Ile Lys Pro Ile Phe Glu Tyr Phe Leu 290 295 300

Trp His Thr His Ile Met Pro Leu Arg Phe His Tyr Lys Ser 305 310 315

<210> 220

<211> 320

<212> PRT

<213> Homo sapiens

<400> 220

Ile Ile Pro Ser Val Ile Phe Phe Tyr Cys Arg His Cys Lys Ser Leu 1 5 10 15

Asn Leu Asp Lys Ser Tyr Ser Gly Gln Asn Lys Asn Phe Thr Val Ile 20 25 30

Asn Val Cys Ser Cys Thr Cys Glu Val Lys Ser Phe Ser Leu Leu Ser 35 40 45

Asn Ser Tyr Val Pro Asn Ile Phe Ser Lys Phe Leu Lys Thr Tyr Asn 50 55 60

Gly Glu Lys Asn Asn Pro Phe Ser Ser Pro Ala Ser Leu Met Lys Asn 65 70 75 80

Ser His Phe Ser Leu Phe Leu Leu Phe Leu Leu Val Val Phe His Ile 85 90 95

Ser Cys Leu Ser Ala Val Ser Cys Phe Met Gln Phe Arg Pro Tyr Leu 100 105 110

Leu Thr Ser Leu Ser Phe Gln Tyr Lys Asp Ser Cys Ile Phe Ser Phe 115 120 125

Asn Phe Thr Phe Leu Asn Ser Pro Phe Pro Phe Cys Asp Pro Gly Ile 130 $$135\$

Ser Gly Val Leu Phe Phe Phe Ile Leu Pro Asp Phe Ile Tyr Ile Cys 145 150 155 160

Val Tyr Ser Phe Leu Leu Phe Phe Lys Leu Lys Thr Cys Leu Ser Ser 165 170 175

Lys Ser Gly Ser Phe Phe Phe Ser Trp Arg Pro Leu Ser Gln Asn Pro 180 185 190

Leu Ser Phe Cys Phe Asn Glu Asp Tyr Met Leu Ser Leu Trp Leu Pro 195 200 205

Ser Cys His Trp Ser Ser Leu Cys Cys Tyr Pro Gly Leu Lys Leu 210 215 220

Leu	Phe	Leu	Asp	Pro	Ile	Leu	Ser	Leu	Ser	Trp	Phe	Ile	Thr	Leu	Phe
225					230					235					240

Cys Trp Gly Thr Ser Ser Cys Met Trp Asn Val Met Ser Ala Ser Leu 245 250 255

Cys Phe Lys Met Tyr Ile Phe Cys Pro Leu Phe Asp Leu Ala Glu Asn 260 265 270

Arg Ile Leu Asp Cys Lys Ile Gln Lys Leu Leu Gln Arg Leu His His 275 280 285

Arg Gln Lys Asn Leu Cys Thr His Phe Pro Pro Thr Ser Ser Pro Pro 290 295 300

Ala Ala Arg Ser Asn His Glu Ser Phe Cys Gln Asn Arg Phe Ala Tyr 305 310 315 320

<210> 221

<211> 318

<212> PRT

<213> Homo sapiens

<400> 221

Cys Ile Lys Val Phe Ile Leu Lys Gly Lys Ala Thr Met Ile Ala Gln
1 5 10 15

Leu Trp Tyr Ile Ile Ile Ser His Ile Ile Phe Leu Leu Glu Lys $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30 \hspace{1.5cm}$

Gly Ile Tyr Asp Phe Ser Arg Met His Thr Glu Lys Pro Leu Cys Ile 35 40 45

Ile Leu Cys Glu Ser Lys Leu Cys Thr Tyr Phe Glu Val Ile Cys Ile 50 55 60

Leu Cys Arg Arg Lys Glu Asn Asn Leu Leu Tyr Phe Val Cys Gly Ile 65 70 75 80

Lys Met Gly Leu Asn Glu Lys Met Val Asp Leu Lys Tyr Gly Gly Arg 100 \$105\$

Phe Phe Trp Gly Thr Leu Asp Leu Ile Met Phe Phe Ser Ile Pro Phe 115 120 125

Leu Gln Met Phe Ile Ile Leu Leu Phe Ile Tyr Ala Ala Ile Ile 130 135 140

Tyr Val Cys Ser Cys Phe Ser Cys Ser Gln Thr Leu Tyr Asn Val Ile 145 150 155 160

Ile Gln His Glu Ser Phe Ser Ile Leu Leu Phe Leu Val Asn Ile Ile 165 170 175

Ile Trp Gly Tyr Trp Cys Thr His Cys Gln Phe Ile His Phe Asn Tyr 180 185 190

Ser Thr Gly Phe Trp Ser Met Asn Ile Ser Tyr Phe Ile Tyr Leu Tyr 195 200 205

Pro Ile Asp Val Tyr Leu Val Pro Ile Phe Ala Val Lys Asn Asn Ala Page 126 The set of the set of

	210					215					220				
Ala 225	Ile	Lys	Pro	Ser	Gly 230	Ile	Cys	Phe	Ser	Lys 235	Cys	Ile	Pro	Arg	Ser 240
His	Arg	Phe	Ser	Gly 245	Cys	His	Ser	Leu	Lys 250	Leu	Leu	Gly	Lys	Thr 255	Val
Arg	Ile	Leu	Gly 260	Asn	Leu	Leu	Asn	Leu 265	Thr	Trp	Leu	Asn	Phe 270	Leu	Ala
Gln	Met	Arg 275	Val	Val	Leu	Asp	Leu 280	Ile	Lys	Asn	Met	Val 285	Ile	Phe	Cys
Glu	Thr 290	Leu	Ala	Asn	Tyr	Asp 295	Asn	Lys	Trp	Ser	Leu 300	Gly	Ile	Ser	Val
Ile 305	Thr	Ala	Ile	Lys	Arg 310	Gly	Leu	Lys	Tyr	Pro 315	Lys	Glu	Lys		
<210 <211 <212 <213	L> 3 2> E	222 317 PRT Homo	sapi	Lens											
<400)> 2	222													
Asn 1	Tyr	Leu	Ser	Asp 5	Cys	His	Ser	Phe	Met 10	Glu	Leu	Ser	Val	Asn 15	Lys
Val	Leu	Leu	Tyr 20	Val	Asn	Met	Arg	Leu 25	Ile	Phe	Phe	Leu	Ser 30	Leu	Leu
Phe	Gly	Leu 35	Tyr	Phe	Phe	Gln	Val 40	Arg	Ala	Ile	His	Gly 45	Ser	Ala	Ser
Thr	Asp 50	Gln	His	Leu	Leu	Ser 55	Tyr	Phe	Ala	Ile	Trp 60	Leu	Pro	Gly	Leu
Arg 65	Glu	Cys	Phe	Phe	Asn 70	Leu	Tyr	Trp	Trp	His 75	Cys	Trp	Leu	Leu	Ile 80
Leu	Leu	Phe	Val	Leu 85	Ala	Arg	Leu	Leu	Phe 90	Lys	Arg	Arg	Val	Ile 95	Asn
Ser	Val	Leu	Arg 100	Ala	Glu	Val	Lys	Tyr 105	Arg	Met	Glu	Leu	Glu 110	Glu	Asn
Glu	Ala	Ser 115	Ile	Ser	Val	Lys	Lys 120	Ser	Phe	Ile	Lys	Ala 125	Val	Gly	Asp
Arg	Glu 130	Leu	Gly	Val	Thr	Ile 135	Leu	Val	Pro	Ile	Val 140	Met	Val	His	Pro
Gly 145	Lys	Ile	Gln	Gly	Lys 150	Arg	Glu	Ser	Leu	Trp 155	Lys	Ser	Phe	Gly	Cys 160
Val	Leu	Ser	Cys	Phe 165	Arg	Lys	Leu	Ala	Asn 170	Phe	Tyr	Thr	Ser	Val 175	Phe
Arg	Leu	Ser	Cys 180	Leu	Asp	Thr	His	Pro 185	Thr	Gln	Ser	Ala	Gln 190	Gln	Tyr
Phe	Leu	Cys 195	Ser	Ser	Leu	Ser	Pro 200	Gly	Ile	Arg	Met	Ala 205	Pro	Leu	Gly

Glu Leu Leu Ser His Met Ile Lys Asp Leu His Tyr Phe Leu Ser Lys

Ser Arg Arg Lys Val Gly Glu Leu Ala Trp His Leu Ala Gly Thr Tyr

Asn Thr Ala Ser Thr Trp His Leu Leu Asp Arg Leu Pro Leu Pro Thr

Val Val Thr Thr Ser Met Gly Gly Gly Trp Cys Cys Thr Val Pro Met

Gly Trp Cys Ala Cys Ser Pro Met Pro Pro Ala Leu Pro Gln Cys Cys

Leu Leu Gln Ser His Leu Phe Arg Trp Ser Ile Leu Ile Glu Lys Val 295

Leu Gly Thr Ile Cys Leu Lys Cys Ser Pro Ala Asn Val

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<213> Homo sapiens

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Gln Thr His Thr Tyr Val Glu Ile Leu Arg Gly Asp Asp Val Leu Phe

Thr Ser Ala Cys Leu Met Leu Ser Pro Val Leu Gly Thr Asn Ala Ile

Val Phe Leu Glu His Glu Ile His Gln Lys His Glu Trp Ile Trp Trp

Gly His Lys Arg Leu Thr Pro Gly Ser Arg Asn Leu Gly Gly Glu Thr

Ser Gly Leu Glu Gly Ala Glu Asp His Cys Val Arg Ser Thr Trp Phe

Trp Leu Ala Gly Leu Ala Arg Met Gln Arg Ser Phe Trp Val Leu Leu 105

Lys Phe Lys Thr Thr Ile Ile Ile Asn Ile His Leu Val Leu Thr Met

Cys Gln Ser Leu Ile Ala Phe Tyr Val Phe Ser His Ser Ser Lys Phe 135

Gly Leu Asp Ile Phe Pro Val Tyr Thr Ile His Met Arg Lys Arg Val 155

Glu Gln Gly Gly Ala Glu Thr Cys Pro Arg Ile His Ser Lys Asn Gly

Asn Trp Asp Trp Ser Pro Arg Asp Ser Cys Phe Leu Asp Phe Val Phe 185

Leu Ile Ser Leu Pro Leu Arg Leu Phe Ile Asp Ile Phe Thr Phe Tyr 195 200 205

Phe Glu Ile Ile Val Asp Ser Gln Glu Val Thr Arg Glu Arg Ser Cys 210 220

Val Leu Phe Thr Gln Ile Ser Pro Met Leu Arg Phe Tyr Ile Thr Val 225 230 235 240

Ile Gln Tyr Glu Asn Gln Glu Thr Asp Ile Gly Ser Ile Tyr Val Tyr 245 250 255

Thr Ser Met Pro Phe His His Val Met Pro Pro Ser Pro Ser Cys Arg 260 265 270

Thr Val Pro Ser Pro Arg Arg Ser Ala Thr Cys Cys Ser Phe Lys Val 275 280 285

Ile Pro Ala Leu Phe Pro Val Pro Thr His Cys His Tyr Ala Pro Leu 290 295 300

Val Thr Thr Asn Leu Phe Ser His Leu Tyr 305

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Ser Gln Asp Asn Asn His Leu Ala Thr Val Ala Met Tyr Leu Lys Asp 35 40 45

Tyr Ser Leu Gly Val Phe Phe Leu Met Ser Met Glu Gln Asp Asp Trp 50 60

Ala Phe Glu Asp Ile Lys Glu Thr Lys Gly Pro Asp Cys Asn Gln Arg 65 70 75 80

Phe His Ser His Arg Pro Gly Phe Thr Trp Gln His Thr Phe Trp Thr 85 90 95

Met Arg Thr Asn Cys Arg Ala Leu Pro His Ser Trp Thr Leu Ser His
115 120 125

Ser Ser Arg Trp Gly Pro Pro Ala His Cys Trp Leu Cys Pro Pro Gln 130 135 140

Phe Leu Arg Ile His Thr Asp Phe Ala Lys Ile Leu Arg Tyr Val Gly 145 150 155 160

His Glu Leu Trp Val Cys Ala His Leu Val Pro Ser Leu Tyr Ser Thr

Leu His Ser Ser Gly Val Phe Leu Thr Ala Gly Ala Thr Phe His Leu Page 129 190

His	His	Tyr 195	Tyr	Ile	Lys	Trp	Ala 200	Ser	Ile	Phe	Pro	Ser 205	Glu	Phe	Gln
Pro	Leu 210	Ser	Gly	Asn	Leu	Thr 215	Phe	Phe	Leu	Val	Ser 220	Phe	Ala	Leu	Arg
Phe 225	Cys	Pro	Phe	Tyr	Cys 230	Ser	Asn	Glu	Phe	Thr 235	Gln	Pro	Ser	Ile	Pro 240
His	Glu	Ser	Gly	Gln 245	Asp	Pro	Val	Thr	Cys 250	Asp	Ser	His	Thr	Asp 255	Cys
Val	Arg	Val	Thr 260	Pro	Pro	Val	Pro	Gly 265	Phe	Pro	Glu	Pro	Cys 270	Leu	Ser
Arg	Leu	Thr 275	Gly	Gln	Ser	Trp	Asp 280	Met	Asn	Trp	Ala	Pro 285	Glu	Leu	Ala
Leu	Phe 290	Val	Ser	Arg	Ser	Ser 295	Arg	Cys	Leu	Cys	Arg 300	Leu	Pro	Asn	Pro
Cys 305	Ser	Trp	Ala	Trp	Val 310	Ala	Glu	Ser	Ala	Gly 315	Arg	Leu	Trp	Cys	Met 320
His															
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1	Cys Thr	_	_	5					10					15	
1 Gln	_	His	Thr 20	5 Tyr	Val	Glu	Ile	Leu 25	10 Arg	Gly	Asp	Asp	Val 30	15 Leu	Phe
1 Gln Thr	Thr	His Ala 35	Thr 20 Cys	5 Tyr Leu	Val Met	Glu Leu	Ile Ser 40	Leu 25 Pro	10 Arg Val	Gly Leu	Asp Gly	Asp Thr 45	Val 30 Asn	15 Leu Ala	Phe Ile
1 Gln Thr	Thr Ser	His Ala 35 Leu	Thr 20 Cys	5 Tyr Leu His	Val Met Glu	Glu Leu Ile 55	Ile Ser 40 His	Leu 25 Pro Gln	10 Arg Val Lys	Gly Leu His	Asp Gly Glu 60	Asp Thr 45 Trp	Val 30 Asn Ile	15 Leu Ala Trp	Phe Ile Trp
1 Gln Thr Val Gly 65	Thr Ser Phe	His Ala 35 Leu Lys	Thr 20 Cys Glu Arg	5 Tyr Leu His	Val Met Glu Thr	Glu Leu Ile 55 Pro	Ile Ser 40 His	Leu 25 Pro Gln Ser	10 Arg Val Lys Arg	Gly Leu His Asn 75	Asp Gly Glu 60 Leu	Asp Thr 45 Trp Gly	Val 30 Asn Ile	15 Leu Ala Trp Glu	Phe Ile Trp Thr
Gln Thr Val Gly 65 Ser	Thr Ser Phe 50	His Ala 35 Leu Lys Leu	Thr 20 Cys Glu Arg	5 Tyr Leu His Leu Gly 85	Val Met Glu Thr 70 Ala	Glu Leu Ile 55 Pro Glu	Ile Ser 40 His Gly Asp	Leu 25 Pro Gln Ser	10 Arg Val Lys Arg Cys 90	Gly Leu His Asn 75 Val	Asp Gly Glu 60 Leu Arg	Asp Thr 45 Trp Gly Ser	Val 30 Asn Ile Gly	Leu Ala Trp Glu Trp 95	Phe Ile Trp Thr 80 Phe
Gln Thr Val Gly 65 Ser Trp	Thr Ser Phe 50 His	His Ala 35 Leu Lys Leu Ala	Thr 20 Cys Glu Arg Glu	5 Tyr Leu His Leu Gly 85 Leu	Val Met Glu Thr 70 Ala	Glu Leu Ile 55 Pro Glu Arg	Ile Ser 40 His Gly Asp	Leu 25 Pro Gln Ser His	10 Arg Val Lys Arg Cys 90 Arg	Gly Leu His Asn 75 Val	Asp Gly Glu 60 Leu Arg	Asp Thr 45 Trp Gly ser Trp	Val 30 Asn Ile Gly Thr	Leu Ala Trp Glu Trp 95 Leu	Phe Ile Trp Thr 80 Phe Leu
Gln Thr Val Gly 65 Ser Trp Lys	Thr Ser Phe 50 His Gly Leu	His Ala 35 Leu Lys Leu Ala Lys 115	Thr 20 Cys Glu Arg Glu Gly 100 Thr	Tyr Leu His Leu Gly 85 Leu Thr	Val Met Glu Thr 70 Ala Ala	Glu Leu Ile 55 Pro Glu Arg	Ile Ser 40 His Gly Asp Met Ile 120	Leu 25 Pro Gln Ser His Gln 105 Asn	Arg Val Lys Arg Cys 90 Arg	Gly Leu His Asn 75 Val Ser	Asp Gly Glu 60 Leu Arg Phe	Asp Thr 45 Trp Gly Ser Trp Val 125	Val 30 Asn Ile Gly Thr Val 110 Leu	Leu Ala Trp Glu Trp 95 Leu Thr	Phe Ile Trp Thr 80 Phe Leu Met
Gln Thr Val Gly 65 Ser Trp Lys Cys	Thr Ser Phe 50 His Gly Leu Phe	His Ala 35 Leu Lys Leu Ala Lys 115 Ser	Thr 20 Cys Glu Arg Glu Gly 100 Thr	Tyr Leu His Leu Gly 85 Leu Thr	Val Met Glu Thr 70 Ala Ala Ile Ala	Glu Leu Ile 55 Pro Glu Arg Ile Phe 135	Ile Ser 40 His Gly Asp Met Ile 120 Tyr	Leu 25 Pro Gln Ser His Gln 105 Asn Val	Arg Val Lys Arg Cys 90 Arg Ile	Gly Leu His Asn 75 Val Ser His	Asp Gly Glu 60 Leu Arg Phe Leu His 140	Asp Thr 45 Trp Gly Ser Trp Val 125 Ser	Val 30 Asn Ile Gly Thr Val 110 Leu	Leu Ala Trp Glu Trp 95 Leu Thr	Phe Ile Trp Thr 80 Phe Leu Met

Glu Gln Gly Gly Ala Glu Thr Cys Pro Arg Ile His Ser Lys Asn Gly
165 170 175

Asn Trp Asp Trp Ser Pro Arg Asp Ser Cys Phe Leu Asp Phe Val Phe 180 185 190

Leu Ile Ser Leu Pro Leu Arg Leu Phe Ile Asp Ile Phe Thr Phe Tyr 195 200 205

Phe Glu Ile Ile Val Asp Ser Gln Glu Val Thr Arg Glu Arg Ser Cys 210 220

Val Leu Phe Thr Gln Ile Ser Pro Met Leu Arg Phe Tyr Ile Thr Val 225 230 235 240

Ile Gln Tyr Glu As
n Glu Thr Asp Ile Gly Ser Ile Tyr Val Tyr 245 250
 255

Thr Ser Met Pro Phe His His Val Met Pro Pro Ser Pro Ser Cys Arg 260 265 270

Thr Val Pro Ser Pro Arg Arg Ser Ala Thr Cys Cys Ser Phe Lys Val 275 280 285

Ile Pro Ala Leu Phe Pro Val Pro Thr His Cys His Tyr Ala Pro Leu 290 295 300

Val Thr Thr Asn Leu Phe Ser His Leu Tyr 305 310

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<212> PRT

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Gly Ala Arg Gly Glu Ala Ser Thr Ser Leu Glu Ser Gln Val Glu 1 5 10 15

Asp Thr Ala Glu Gln Thr Ser Asn Leu Ile Thr Val Thr Leu Ile His 20 25 30

Pro Gln Leu Ala Lys Tyr Thr Leu Ile Val Asn Phe Leu Pro Leu Trp 35 40

Ser Leu Ser Asp Ile Ser Thr Asp Leu Leu Phe Ile Leu Leu Arg Leu 50 55 60

Arg Asn Ile Ile Arg Ile Leu Gln His Leu Gly Glu Ile Ile Glu Ser 65 70 75 80

Ala Met Val Ser Phe Ala Asp Ile Tyr Ser Trp Ser Lys Trp Asn Thr 85 90 95

Asn Gln Asn Trp Leu Pro Tyr Ile Leu Gln Arg Pro Thr Gly Gly Lys 100 105 110

Gly Leu Trp Lys Val Cys Phe Ala Thr Arg Gln Ile Leu Asp His Pro 115 120 125

Val Ser Gly Ser Ile His Ser Phe Pro Asp Ser Pro Asp Asp Ile Pro 130 135 140

Pro Ser Phe Thr Tyr Ile Asn Ser Thr Val Pro Ile Cys Tyr Ile Ala 145 150 155 160

Ser Phe Leu Leu Phe Ile Ile Cys Leu Pro His Gln Asn Ala Ser Ser 165 170 175

Ile Trp Ala Val Ala Thr Leu Phe Thr Val Tyr Leu Ser Val Ser Met 180 185 190

Lys Ser Asp Ile Met Pro Gly Ile Tyr Tyr Glu Leu Asn Asn Tyr Val 195 200 205

Asn Glu Ile Met Arg Lys Ser Cys Leu Ile Thr Cys Gln Pro Tyr Asn 210 215 220

Ala Ser Gln Phe Phe Pro Leu Gln Phe Leu His Leu Asn Trp Ile Thr 225 230 235 240

Gln Met Leu Thr Leu Trp His Cys Trp Asn Asn Tyr Leu Lys Ser Cys 245 250 255

Tyr Gly Val Leu Val Val Leu Thr Glu Gly Asn Lys Ser Phe Arg Asn 275 280 285

Lys Val Phe Leu Ala Phe Ser His Leu Ser Phe Ser Cys Ser Pro Phe 290 295 300

Phe Pro Lys Ala Asp Gln Arg Asn 305

<210> 227

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<212> PRT

<213> Homo sapiens

<400> 227

Gly Cys Ser Pro Glu Asp Asp Leu Gly Cys Ser Gly Val Asn Tyr Pro 1 5 10 15

His Phe Leu Arg Ala Ser Met Trp His Ser Trp Pro Trp Ala Ser Ala 20 25 30

Cys Pro Ala As
n Ala Gl
n Pro Val Pro Ala Val Pro Pro Pro Leu Ala 35 40 45

Ala Gln Pro Gln Val Trp Pro Ser Gly Leu Tyr Pro Arg Pro Pro His 50 60

Leu Pro Thr Leu Phe Leu Cys Ser Glu Leu Ser Thr Ala Ala Pro Ala 65 70 75 80

Pro Trp Leu Pro Leu Ile Leu Cys Leu Val Ser Phe Phe Gly His Ser 85 90 95

Phe Ala Ala Thr Leu Tyr Trp Ile Thr Leu Leu Gly Val Leu Ile Ile 100 105 110

Ser His Pro Leu Leu Pro Asn Gly Pro Ser Thr Ile Ser Phe His 115 120 125

Arg Leu Asn Gly Lys Gly Gly Val His Ile His Arg Ile Lys Gln Val

	130					135				0010	140	1.01	2.0		
Met 145	Pro	Leu	His	Ser	Gly 150	Val	Cys	Asp	Asp	Asn 155	Phe	Tyr	Ala	Phe	Tyr 160
Thr	Asn	Ile	Phe	Val 165	Ser	Leu	Cys	Phe	Leu 170	Pro	Cys	Leu	Arg	Ala 175	Leu
Gln	Gly	Leu	Ala 180	Leu	Gly	His	Pro	Val 185	Leu	His	Thr	His	Thr 190	Arg	Thr
His	Thr	Arg 195	Thr	Cys	Thr	His	Val 200	His	Thr	His	Ala	His 205	Thr	His	Thr
His	Thr 210	His	Lys	His	Thr	His 215	Ser	Leu	Ala	Leu	Ala 220	Asn	Ala	Ser	Leu
Ala 225	Leu	Thr	Thr	Asn	Val 230	Ser	Ala	Ser	Asp	Leu 235	His	Asn	Leu	Ile	Trp 240
Leu	Phe	Leu	Phe	Leu 245	Gly	Val	Ile	Cys	Leu 250	Pro	Glu	Gly	Arg	Ala 255	Asn
Ser	Pro	Ala	Ile 260	Pro	Ala	Ala	Tyr	Ser 265	Leu	Pro	Val	Pro	Ser 270	Phe	Pro
Arg	Arg	Gln 275	Gln	Thr	Glu	Arg	Gly 280	Lys	Arg	Tyr	Lys	Glu 285	Ala	Trp	Gly
Trp	Gly 290	Lys	Glu	Ser	Ser	Tyr 295	Leu	Thr	Ser	Ala	Pro 300	Leu	Thr	Leu	Leu
Gly	Glu	Val	Pro	Thr	His	Ser	Ser	Gly	Met	Thr	Thr	Arg	Met	Val	Ser

Gly Glu Val Pro Thr His Ser Ser Gly Met Thr Thr Arg Met Val Ser 305 310 315 320 310

A CONTRACT AND CON

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<213> Homo sapiens

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Asp Cys Ala Ala Ala Leu Pro Gly Gln Ser Lys Thr Pro Phe Gln Lys

Lys Lys Lys Lys Lys Glu Arg Lys Glu Phe Met Asp Val Ile Val

Lys Gly Leu Val Pro Ser Pro Ile Ser Cys Phe Pro Ser Cys His Val

Thr Cys Trp Phe Pro Phe Thr Phe Cys His Asp Trp Lys Leu Pro Gly

Ala Ser Pro Glu Ala Lys Gln Met Pro Gly Pro Cys Phe Leu Tyr Ser 65 70 75 80

Leu Leu Asn Pro Glu Pro Asn Lys Pro Leu Phe Ile Thr Asn Tyr Leu

Gly Ser Asp Ser Pro Leu Gln Cys Lys Trp Thr Asn Thr Pro His Asp 105

Leu His Pro Gln Thr Thr Gly Gly Thr Gln His

<210> 229

<211> 210

<212> PRT

<213> Homo sapiens

<400> 229

Ser Ala Cys Gly Gly Phe Asn Gly Leu His Phe Tyr Ser Asn Ile Ser 1 $$ 5 $$ 10 $$ 15

Gln Phe Ile Phe Gln Ile Arg Ser Lys Gln Asn Tyr Ser Trp Arg Leu 35 40 45

Cys Cys Leu His Pro Gln Tyr Gln Met Phe Met Ala Ser Thr Glu Pro 50 55 60

Gly Val Ser Met Glu Ser Leu Arg Asp Cys Leu Ser Phe Ser Glu Glu 65 70 75 80

Ser Val Met Phe Ser Ile Pro Glu Glu Ala Glu Ile Thr Leu His Tyr 85 90 95

Phe Phe Glu Leu Cys Ala Gly Arg His Gly Ser Glu Ile Cys Leu Ser 100 105 110

Asp Ser Asn Ser Ser Ser Ile Cys Val Leu Val Phe Val Val Ala Phe 115 120 125

Cys Ile Gln Leu Pro Asp Asn Phe Phe Leu Met Phe Cys Cys Asn Leu 130 135 140

Val Lys Leu Leu Phe Tyr Lys Leu Met Phe Trp Tyr Phe Gly His Gln 145 150 155 160

Ile Leu Ala Arg Gly Lys Ile Arg Thr Arg Ser Thr Ser Cys Lys Thr 165 170 175

Lys Leu Ile Phe Leu Val Asp Phe Trp Asn Gly Leu Phe Cys Phe Pro 180 185 190

Ile Cys Val Tyr Phe Leu Lys Ser Cys Arg Cys Ile Tyr Glu Tyr Leu 195 200 205

Phe His 210

<210> 230

<211> 204 <212> PRT

<213> Homo sapiens

<400> 230

Val Ile Asn Ser Ser Cys Pro Ser Ile Ile Gly Leu Gly Thr Pro Gly 1 5 10 15

Phe Ser Cys Ser Ser Ser Val Ile Gly Arg Lys Ile Gly His Trp Leu 20 25 30

Lys Gln Ile Leu Ser Phe Leu Gly Val Val Phe Thr Leu Lys Ala Leu 35 40 45

Arg Pro Leu Gly Gly Ser Ala Ile Leu Gln His Gly Arg Cys Pro His 50 60

Thr Trp Met Ala Ala Phe Tyr Tyr Tyr Ser Leu Asp Thr Gly Phe Phe 65 70 75 80

Ala His Val Tyr Thr Leu Gly Ser Ile Cys Tyr Pro Phe Phe Thr Leu 85 90 95

Lys Gln Val Ile Gly Lys Phe Ile Ser Ile Trp Lys Thr Asn Asp Gln 100 105 110

Lys Asn Pro Ser Asn Pro Lys Phe Thr Glu Ala Arg Leu Lys Arg
115 120 125

Asn Ala Leu Thr Leu Asp Arg Ser Pro Pro Ser Ile Leu Gly Ile Thr 145 150 155 160

Ser Phe His Phe Ser Cys Lys His Ser Ser Pro Cys Thr Leu Gln Asp \$165\$

Phe Ser Leu Phe Glu Ile Gly Leu His Ser Val Gly Arg Gly Asp Trp 180 185

Phe Gln Lys Glu Gly Ala Ala Gly Arg Asp Phe Ala 195 200

<210> 231

<211> 186

<212> PRT

<213> Homo sapiens

<400> 231

Gln Gly Arg Cys Thr Pro Pro Val Ile Leu Gly Val Ile Ser Ser Pro 1 5 10 15

Pro Leu Asp Ile Arg Asn Asn Ile Thr Ala Gly Val Gly Val Val Tyr $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30 \hspace{1.5cm}$

Ser Leu Cys Asn Ile Gly Ser Asn Ile Ile Leu Ser Pro His Trp Ile 35 40 45

Leu Gly Thr Ile Ser Gln Glu Val Trp Thr Pro Pro Ala Ile Leu Gly 50 55 60

Val Thr Ser Phe Ser Phe Pro Ser Gly Tyr Glu Gln Tyr Cys Ile Gly 65 70 75 80

Val Tyr Thr Pro Ser Asp Ile Arg Ser Asn Ile Ile Leu Ser His Ser 85 90 95

Gly Tyr Glu Gln Tyr Leu Arg Arg Ser Val Glu Pro Leu Arg Tyr Glu
100 105 110

Tyr His Pro Leu Pro Pro Trp Ile Leu Gly Thr Ile Thr Gln Gly Glu 115 125

Tyr Thr Ala Pro Val Ile Leu Arg Val Ile Ser Ser Pro His Leu Asn 135 130

Ile Arg Asn Asn Ile Arg Gly Val Gly Tyr Thr Ile Cys Asp Ser Gly

Arg Asn Ile Ile Leu Ser Pro Pro Gly Tyr Glu Gln Tyr His Lys Trp

Ser Ile His Pro Leu Arg Tyr Trp Glu Tyr

<210> 232

<211> 157

<212> PRT

<213> Homo sapiens

<400> 232

Asp Asn Leu Cys Ser Pro Cys Ser Ser Thr Pro His Ile Pro Ile Val

Cys Pro Phe His Ser Ala Pro Phe Ser Val Gln Thr Glu Leu Phe Thr

Asn His Tyr Pro Leu Leu Glu Met Glu Gly Ala Pro Phe Pro Thr Pro

Pro Leu Pro Pro Gln Leu Ser Ser Pro Arg Arg Leu Ser Ile Asn Arg

Leu Thr Ile Ser Leu Asn Phe His Ile Phe Val Trp Leu Ser Tyr Leu

Phe Thr Phe Ile Asn Leu Leu Cys Phe Ser Leu Val Asn Gln Ser Phe

Phe Ile Gly Val Ser Ala Val Ser Leu Tyr Asp Gly Glu Glu Lys Asn 105

His Pro Leu Ser Thr Pro Thr Ser Asp Arg Ser Gln Asp Ile Pro Leu

Lys Phe Gly Lys Val Asn Thr Ser Thr Pro Cys Ile Leu Pro Asp Asn

Thr Lys Asn Phe Ile Gln Tyr Ile Tyr Tyr Met Ile Lys 150

<210> 233

<211> 178

<212> PRT <213> Homo sapiens

<400> 233

Arg Ser Arg Lys Val Asn Trp Pro Lys Val Gly Ile Tyr Ile Pro Val 10

Leu Leu Glu Cys Cys Leu Phe Leu Asn His Pro Trp Ser Arg Pro

Thr Pro Ser Cys Thr Tyr Thr Asn Pro Ile Leu Ser Gln Thr Gly Leu

00100US1.ST25 Trp Leu Asp Ile Gly Glu Lys Gln Leu Asp Gly Leu Thr Pro Lys Lys 50 60

Asn Pro Ala Arg Asp Gly Gln Asn Phe Arg Gly Gly Leu Arg Tyr Arg 65 70 75 80

Pro Cys Leu Leu Ser Ser Pro Ser Cys Arg Glu Pro Arg Phe Ile $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$

His Asn Lys Ile Pro His Ile His His Pro Ser Ile Tyr Ser Cys Asn $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110$

Leu Ile Phe Pro Gly Trp Trp Thr Arg Ala Arg Glu Pro Gln Val Glu 115 120 125

Ile Gln Lys Ala Val Thr Leu Ala Leu Cys Pro Cys Trp Arg Ala 130 $$ 135 $$ 140

Ala Ala Ser His Arg Gly Arg Gly Pro Thr Glu Leu Leu Thr Leu Lys 145 150 155 160

Pro Ser Ala Asp Gly Arg Ala Lys Thr Ala Leu Glu His Ala Leu Trp 165 170 175

Gly Phe

<210> 234

<211> 188

<212> PRT

<213> Homo sapiens

<400> 234

Ile Glu Thr Lys Leu Asn Thr Phe Ala Lys Leu Leu Arg Ser Lys Phe 1 5 10 15

Leu Val Pro Arg Leu Glu Leu Pro Asn Ala Asp Lys Ser Ser Pro Val 20 25 30

Gly Ser Pro Thr Leu Phe Lys Gln Phe Leu Asp Phe Ala Pro Val Glu 35 40 45

Ala Asp Met Leu Asn His Lys Thr Pro Leu Leu Leu Ala Leu Ala Tyr 50 55 60

Cys Phe Gly Arg Ser His Phe Ser Lys Ile Arg Ala Ser Leu Ile Asn 65 70 75 80

Thr Gly Ile Arg Phe Leu Ser Gly Val Gly Ile Pro Glu Asp Arg Ile 85 90 95

Ile Tyr Phe Ala Leu Ser Arg Cys Val Met Arg Thr Glu Ala Met Leu 100 105 110

Ile Arg Asp Pro Trp Glu Leu Val Ile Tyr Tyr Leu Leu Phe Leu Pro 115 120 125

Lys Ile Asp Leu Met Glu Arg Gly Cys Ile Ile Tyr Pro Leu Ser Lys 130 140

Glu Ala Phe Pro Asn Thr Thr Glu Ala Val Ile Leu Lys Thr Ala Leu 145 150 155 160

Trp Leu Cys Ser Gln Leu Tyr Phe Leu Pro Phe His Asn Phe Leu Pro
Page 137

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Ser Ala Met Glu Leu Met Gly His Thr His Ile His 180 185

<210> 235

<211> 165

<212> PRT

<213> Homo sapiens

<400> 235

Lys Lys Lys Thr Pro Met Ile Trp Ile Leu Leu Ser Phe Leu Phe Ser

Gln Met Val Ile Leu Lys Leu Ile Glu Val Val Tyr Arg Val His Ser

His Thr Val Arg Lys Arg Gln Ser Gln Gly Leu Asn Ser Ser Ser Leu

Thr Ile Glu Pro Ile Phe Leu Ile Thr Ile Gln Tyr Phe Thr Ile Cys

Ser Ile Lys Arg Asn His Phe Ser Glu Trp Arg Asn Ile His Glu Asn

Lys Ser Ile Ile Gln Asp Thr Cys Lys Ala Ser Arg His Ser Arg Phe

Arg Leu Leu Ala Pro Trp Pro Arg Leu Ile Thr Phe Gln Glu Asn Lys 105

Thr Thr Tyr Gln Asp His Thr Ser Arg Asn Asp Leu Arg Ile Met Gly

Thr Ala Ile Trp Val Ser Asn Gly Leu Glu Ser Asp Lys Trp Phe Leu 135

Asn Arg Phe Pro Glu Trp Gly Asn Leu Val Leu His Gln Ala Thr Tyr

Val Ile Phe Ile Leu 165

<210> 236

10

<211> 218

<212> PRT

<213> Homo sapiens

<400> 236

Ser Phe Leu Ser Phe Asn Arg Val Glu Lys Ile Ile Ile Ser Trp Glu

Pro Ser Phe Phe Tyr Tyr His Glu Cys Lys Cys Thr Ser Met Thr His

Leu Pro Leu Arg Ile Lys Leu Gln Tyr Lys Lys Tyr His Tyr Thr Tyr

Leu Ser Leu Ser Phe Asn Cys Leu Leu Glu Pro Ile Leu Phe Cys Leu

Pro Arg Thr Ser Thr Met Asp Tyr Pro Phe Thr Ile Ala Leu Ser Phe Page 138

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with the H. Hart word hard back but

Ser Ser Phe Cys Ile Cys Phe Pro Leu Ile Phe Lys His Asp Val Ile

Phe Ile Arg Asp Ile Asn Ile Leu Ile Thr Trp Phe Thr Arg Thr Thr 105

Pro Ser Ser Val Val Trp Arg Thr Lys Leu Leu Glu Arg Asp Val Gln

Thr Gln Tyr Leu Tyr Phe Cys Met Pro His Lys Ser Ser Leu Ile Phe 135

Ile Leu Ile Ser Leu Leu Lys Asp Val Thr Lys Asp Thr Asn Glu Phe

Gln Lys Ser Pro Asn Pro Met Glu Ile His Phe Pro Leu Ser Leu Ser

Ser Asn Ile Leu Pro Leu Val Phe Gln Asp Ser Phe Leu Leu Ser Phe 185

Leu Leu Thr Leu Phe Ser Ser Leu Lys Ile His Pro Pro Leu Pro Ser 200

His Lys Met Leu Arg Val Glu Gly Gly Ser 215

<210> 237

<211> 139 <212> PRT <213> Homo sapiens

<400> 237

Thr Gln Cys Gln Phe Thr Lys Tyr Thr Ile Ile Tyr Ser Gln Asn Thr 10

Phe Ile Lys Arg Asn Phe Phe Lys Arg Arg Ser Cys Gln Cys Gln Tyr

Arg Asn Tyr Lys Asn Pro Phe Leu Phe Pro Leu Glu Ile Pro Ser Leu

Asp Cys Cys Ser Lys Asn Leu Ile Ser Lys Val Val Ser Leu Ser Leu

Asp Asn Asp Ile Arg Lys Cys Ser Arg Gln Ile Phe Ser Lys Ile Gln

Ser Ile Trp Tyr Leu Pro Lys Ser Lys Leu Gln Arg Glu Pro Glu Cys 85

Ser Pro Thr Ala Phe Ser Ser Ser Thr Gln Trp Ile Ser Tyr Met Leu 1.05

Asn Cys His Val Cys Ala Ser Leu Lys Cys Ala Phe Leu Phe Thr Glu

Met Arg Asp Val Leu Phe Met Ile Phe Ser Leu 135

<210> 238 <211> 213

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<212> PRT
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<213> Homo sapiens

<400> 238

Phe Gln Tyr Phe Val Thr Cys Arg Ser Lys Trp Trp His Ala Ser His

Leu Val Asn Ser Arg Ser Cys Cys Val Ser Asn Gly Asp Thr Leu Trp

Leu Leu Gln Met Val Thr Leu Pro Asn Cys Phe Pro Lys Arg His Val

Ala Phe Phe Ser Gln Ser Leu Ile Leu Thr Leu Met Val Ile Leu Leu

Tyr Phe Tyr Met His Leu Val Thr Cys Leu Ile Val Ile Phe Leu Glu

Ile Gln Phe Leu Leu His Arg Val Ser Phe Glu Ile Lys Glu Arg Glu

Val Ala Asn Leu Gly Cys Asn Asn Phe His Leu Lys Val Asp Pro Cys

Phe Tyr Tyr Pro Ile Ile Asn Val Phe Cys Phe Pro Leu Ser Ala Ser 120

Tyr Cys Ser Phe Asp Ser Tyr Cys Gln Thr Glu Leu Ser Cys Phe Leu

Ala Arg Lys Glu Thr Thr Met Asn Glu Pro Leu Asp Tyr Leu Ala Asn

Ala Ser Asp Phe Pro Asp Tyr Ala Ala Ala Phe Gly Asn Cys Thr Asp

Glu Asn Ile Pro Leu Lys Met His Tyr Leu Pro Val Ile Tyr Gly Ile

Ile Phe Leu Val Gly Phe Pro Gly Asn Ala Val Val Ile Ser Thr Tyr 195 200

Ile Phe Lys Met Arg 210

<210> 239 <211> 168

<212> PRT

<213> Homo sapiens

<400> 239

Trp Phe Thr Tyr Pro Leu Asn Lys Gln Leu Leu Arg Ile Pro Ala Pro

Ala Gln Arg Gln Tyr Trp Gly Leu Cys Leu Arg Met Trp Ala Leu Glu

Leu Cys Gly Trp Gly Ser Asn Ser Gly Arg Ala Ala Val Arg Pro Trp

Thr Ser Gly Ser Ser Lys Thr Asp Arg Gln Phe Ile Phe Ile Leu Val

Pro Gln Ile Val Val Leu Leu Ser Asn Tyr Leu Gly Phe Ile Pro Arg

His Trp Glu Ser Lys Leu Phe Ser Phe Ser Cys Leu Gln Lys Ser Ser

Leu Thr Ile His Val Ala Tyr His Trp Ile Gly Leu His Ile Lys His

Phe Val Thr Thr Phe Ala Cys Gly Tyr Ile Leu Leu Ser Phe Ser Tyr 120

Phe Leu Leu Ala Leu Leu Glu Tyr Ser His Lys Ser Leu Ser Ser His

Phe Trp Pro Pro Phe Asp Ser Phe Ser Leu Leu Cys Cys Cys Glu Ser 150 155

Phe His Val Gln Asp Ser Arg Trp 165

<210> 240 <211> 185

<212> PRT

<213> Homo sapiens

<400> 240

Ser Thr Met Cys Ile Phe Phe Trp Ala Lys Met Arg Gln Arg Cys His

Val Asn Phe Ser Phe Leu His Thr Thr Ile Val Ser His Lys Thr Lys

Asn Lys Arg Lys His Met Phe Thr Val Gly Arg Ile Ile Thr Arg Ser

Ser Val Ala Trp Pro Lys Glu Pro Leu Pro Thr Tyr Trp Gly Cys His

Met Lys Gly Phe Ser Lys Arg Leu Ala Ile Phe Ile Lys Gly Val Arg

His Gly Ser Gly Gln Gln Thr Ser Leu Trp Lys Gly Ser Lys Leu Leu

Gln Gln Asn Glu Arg Ile Met Val His Leu Pro Thr Leu Cys Asn Leu 105

Trp Met Lys Pro Gln Pro Arg Lys Val Lys Leu Leu Cys Val Cys Val

Trp Gly Cys Glu Gly Arg His Arg Lys Gly Lys Ala Asp Arg Pro Trp 135

Lys Thr Asp Ile Ser Pro Gly Glu Trp Asn Gly Gln Ser His Asn Thr

His Val Leu Asn Ile Thr Cys Phe Arg Lys Tyr Asn Ile Lys Thr Leu

Phe Lys Ser Tyr Ser Leu Met Ile Ser 180

- <210> 241 <211> 196 <212> PRT
- <213> Homo sapiens

<400> 241

Val Leu Asp Ile Asp Val Arg Met Gly Gly Leu Ser Tyr Pro Ser Pro 1 5 10 15

Phe Ala Ser Ser Leu Ile Pro Tyr Gln Gly Lys Ser Ser Glu Leu Ser 35 40 45

Asn Glu Ile Trp Lys Glu Lys Val Ser Lys Tyr Thr Gln His Tyr Ser 50 55 60

Thr Ser Phe Ser Leu Gly Leu Ala Ser Leu Gln Arg Glu Tyr Ile Leu 65 70 75 80

Leu Cys Ala Gly Ser Phe Pro Lys Leu Ile Ser Gly Phe Val Asn His 85 90 95

Gly Thr Ile Asp Ile Leu Asp Gln Ile Ile Leu Cys Cys Met Ala Cys $100 \hspace{1cm} 105 \hspace{1cm} 110$

Asp Ala Asn Ser Thr Phe Ser Leu Lys Thr Ile Glu Ile Phe Gln Asp 130 135

Val Ala Lys Cys Pro Ser Gly Leu Lys Val Ala Pro Asn Ser Asn His 145 150 150 160

Cys Phe Glu Ala Cys His His Arg Glu Gly Cys Leu Arg Leu Asn Val 165 170 175

Cys Leu Arg Leu Ile Tyr Thr Pro Lys Ser Asn Ser Thr Val Thr Leu 180 185 190

Ile Ser Arg Lys 195

<210> 242

<211> 198

<212> PRT

<213> Homo sapiens

<400> 242

Phe Ala Leu Phe Pro Met Phe Ile Ile Ser Leu Asn Gly Thr Pro Ile 1 5 10 15

Cys Met Val Ala Trp Glu Ile Tyr Gly Ile Ile Leu Glu Pro Ser Phe 20 25 30

Phe Ile Ile Pro Met Ser Arg Ser Glu Ile Leu Ser Glu Tyr Ala Ser 35 40 45

Leu Ile Tyr Leu Lys Leu Ala His Phe Lys Phe Leu Ser Ile Leu Thr 50 55 60

Leu Leu Tyr Leu Asn Asp Tyr His Ser Pro Asn Cys Phe Leu Met Gly 65 70 75 80

Leu Ile Gly Lys Thr Asn Leu Phe Leu Ile Leu Pro Leu Glu Leu Ser 85 90 95

Phe Gln Thr Arg Met Trp Pro Ser Phe Phe Leu Thr Asn Asp Leu Ile $100 \hspace{1cm} 105 \hspace{1cm} 110$

Val Pro Lys Thr Lys Ser Ile Leu Ser Leu Asn Asn Ile Gln Gly Pro 115 120 125

His Ser Arg Ser Ser Leu Ile Pro Thr Ser Val Phe Leu Ser Ser Ser 130 140

Pro Ser Gln Ser Thr Leu Ser His Thr Arg Tyr Ser Thr Trp Ser His 145 150 155 160

Ile Lys Leu Ser Ile Leu Gly Phe Leu Leu Ala Phe Asn Pro Leu 165 170 175

Leu Gly Trp Cys Ile Pro Gly Glu Trp Ser Asn Pro Cys Thr Cys Tyr 180 185 190

His Ala Pro Thr Phe Leu 195

<210> 243

<211> 180

<212> PRT

<213> Homo sapiens

<400> 243

Leu Cys Asp Gly Val Met Arg Trp Gly Arg Arg Val Trp His His Ala $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Thr Gly Phe Pro Pro Lys Leu Ser Thr Pro Arg Ser Thr Ser Ala Ser 20 25 30

Gly Met Ser Ala Gly Ser Gln Arg Leu Trp Arg Arg Gly Ser Ser His $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ala Val Gln Thr Phe Asn Pro Leu Gln Ser Ser Leu Ala Arg Glu Gln 50 60

Gln Ser Leu Leu Glu Arg Asn Tyr His Ser Lys Gln Glu Phe Arg Pro 65 70 75 80

His Leu Ser Glu Asp His Val Glu Val His Leu Ala Gly Lys Val Ala 85 90 95

Ser Gly Cys Gly Leu Phe Asn Tyr Thr Leu Leu Phe Thr Leu Phe Thr 100 105 110

Ile Val Cys Lys Val Gln His Leu Gln Ala Arg Asn Thr Gly Leu Pro 115 120 125

His Ser Gly Trp Leu Gly Leu Met Lys Ala Ala Lys Gln Cys Ala Gln
130 140

Ser Lys Gln Arg Leu Pro Leu Ala Gly Ala His Ser Pro Arg Glu Gly 145 150 155 160

Ile Ser Phe Ser Leu Asp Leu Gly Ala Lys Ala Thr His Gly Ser Asp Page 143

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that that the time that it is a to the same that the same
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Gln Thr Thr Cys <210> 244 <211> 129 <212> PRT <213> Homo sapiens <400> 244 Val Glu Gln Leu Glu Thr His Gly Ser Val Leu Glu Trp Leu Val Trp Asp His Phe Leu Gly Asp His Ser Ala Leu Thr Asp Gln Thr Gln Val 25 Asn Gly Thr Cys Pro Leu Pro Phe Pro Pro Gly Phe Gly Thr Val Ala Thr Arg Val Val Phe Pro Ser Arg Gln Leu Leu Arg Val Ile Pro Glu His Ser Leu Gly Ala Cys Ser Val Leu Thr Val Ile Ser Phe Ile Leu Thr Ala Ile Pro Phe Cys Ile Phe Ser Gly His Pro Gln Asp His Pro Gly Gln Pro Cys Leu Thr Pro Gly Leu Val Trp Leu His Asp Asn Lys Asp Ala Gly Pro Glu Thr Ile Pro Leu His Gly Ala Cys Ile Phe Pro Leu <210> 245 <211> 181 <212> PRT <213> Homo sapiens <400> 245 Glu Ser Lys Met Leu Ile Gly Gly Ala Pro Pro Gln Cys Val Glu Asp Leu Ala Ala Leu Asp Ala Tyr Ser Gln Ala Leu Gly Thr Arg Glu Ala Pro Gly Leu Pro Phe Trp Ala Val Asp Leu Trp Gly Arg Ser Trp Pro

Leu Ala Ala Leu Asp Ala Tyr Ser Gln Ala Leu Gly Thr Arg Glu Ala 20

Pro Gly Leu Pro Phe Trp Ala Val Asp Leu Trp Gly Arg Ser Trp Pro 35

Leu Gly Trp Cys His Cys Ser Ser Tyr Pro Lys Cys Pro Phe Tyr Ala 55

Cys Ser Gly Leu Ala Ser Asn Thr Leu Lys Val Ser Ser Lys Gly Gln 65

Gly Arg Val Pro Cys Gly Lys Arg Trp Leu Phe Glu Ala Lys Ala Gln 90

Arg Arg His Ser Gln Arg Met Gly Arg Ala Ala Gly Gln Val Ser Ala Page 144

Ser Thr Trp Lys Thr Pro Ala Trp Leu Ala Ala Gly Glu Ile Val Leu

105

Pro Arg Cys Gln Leu Leu Ser Arg Pro Leu Pro Arg Glu Pro Ser His

Leu Ser Phe Ser Tyr Pro Ser Leu Arg Lys Ala Gln Ala Gln Gly Ala

Met Val Pro Cys Ser Gln Thr Val Ile Ser Glu Trp Pro Leu Val Trp 170 165

Gly Pro Arg Val Gln 180

<210> 246 <211> 137

<212> PRT

<213> Homo sapiens

with the H H Hand word that Hand Hand

Gln Asn Thr Phe Tyr His Ile Asn Ser Cys Thr Met Ile Trp Leu Glu

Glu Lys Asn Ser Trp Lys Val Lys Phe Val Leu Lys His Leu Phe Lys

Ser Leu His Thr Phe Ile Cys Pro Asp Lys Thr Cys Leu Asn Phe Phe

Leu Lys Gln Leu Tyr Cys Pro Ser Ile Cys Leu Thr Lys Phe Phe Lys

Gly His Phe Gln Pro Phe Gln Arg His Lys Val Gly Val Pro Lys Pro

Pro Phe Leu Ala Leu Pro Val Glu Asn Thr Met Leu His Ser Tyr Met

Cys Pro Leu Thr Gln Thr Thr Leu Ile Leu Arg Arg Ser Leu Asp Leu 105

Lys Leu Leu Leu Ala Val Pro Ala Asn Ser Arg Val Lys Glu Asp 120

Val Thr Arg His Thr Tyr Leu Pro Phe 130

<210> 247

<211> 149 <212> PRT

<213> Homo sapiens

<400> 247

Ser Pro Met Leu Gln Phe Tyr Arg Leu Gly Lys Leu Arg Ala Gly Val

Thr Cys Tyr Ser Ser Tyr Pro Gln Thr Tyr Lys Thr Lys Ser Phe Thr 25

Glu Val Lys Tyr Asn Leu Phe Gly Leu Leu Phe His Phe Thr Ile Leu Page 145

		35				00100US				1.ST25 45					
Ser	Leu 50	Leu	Val	Phe	Ile	Thr 55	Ile	His	Ser	Lys	Glu 60	Phe	Ile	His	Val
Asp 65	Thr	Ser	Glu	Val	Phe 70	Leu	Ile	Ser	Pro	Val 75	Arg	Pro	Val	Val	Lys 80
Leu	Leu	Trp	His	Tyr 85	Ser	Thr	Phe	Ser	Leu 90	Ser	Val	Phe	Phe	Pro 95	Ser
Pro	His	Arg	Ser 100	Glu	Leu	Ile	Ser	Pro 105	His	Pro	Gly	Pro	Ser 110	Glu	Ser
Phe	Val	Lys 115	Ser	Leu	Leu	Ser	Asn 120	Leu	Ser	Val	Glu	Arg 125	Val	Pro	Leu
Cys	Leu 130	Ser	Glu	Ile	His	Thr 135	Val	Met	Суѕ	His	Leu 140	Thr	Met	Phe	Glr
Ser	Val	Arg	Asp	His											

145

<210> 248

<211> 145

<212> PRT <213> Homo sapiens

<400> 248

The state of the s

Pro Ile Pro Pro Ser Glu Gly Leu Glu Lys Ala Phe Thr Phe Met Ser

Pro Gly Ile Arg Ser Pro Gln Thr Arg Asn Phe Phe Leu Ile Met Glu

Val Trp Gln Trp Ala Thr Lys Pro Lys Val Ser Val Leu Leu Ser Asp 40

Ile Ala Ser Leu Arg Asn Arg Gln Pro Gly Arg Asp Gly Met Ser Leu

Ile Lys Cys Ser Ala Glu Val Ser Ser Arg Gly Leu Trp Cys Cys Pro

Ser Gly Cys Asn Ile Cys Thr Lys Pro Val Thr Glu Tyr Tyr Thr Glu

Ser Val Val Pro Lys Ile His Gly Phe Leu Tyr Gln Gly Leu Asp Ile

Glu Ser Ala Leu Val Thr Ile Lys Trp Leu Arg Asn Phe Tyr Phe Ile

Cys Pro Gln Leu Arg Trp Ile Arg Ser Val Cys Ile Leu Ala Ser Val 135

Cys

145

<210> 249

<211> 146 <212> PRT

<213> Homo sapiens

Leu Thr Ser Val Ser Ser Val Lys Pro Lys Leu Ser Lys Cys Glu Ile 1 5 10 15

Met Lys Cys Val Lys Leu Leu Ile Gln Cys Leu Arg Gln Gln As
n Ser $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30 \hspace{1.5cm}$

Arg Leu Ile Gln Ser Ile Gln Thr Thr Phe Tyr Gly Asp Asn Leu 35 40 45

Trp Ser Glu Arg Leu His Lys Cys Ser Phe His Ser Tyr Ser Ser Ser 50 55 60

Asn Thr Lys Leu Leu Ser Ile Pro Glu Leu Lys Met Thr Leu Leu Thr 65 70 75 80

Asp Leu Tyr Leu Phe Ile Cys His Phe Ser Arg Arg Thr Ala Ile Leu 85 90 95

Pro Gln Ser Pro Tyr Ala Phe Val Glu Ser Trp Leu Lys Pro Gln Ala 100 105 110

Leu Cys Lys Ala Phe Leu Gly Ile Asp Ile Thr Thr Ile Pro Gln Asn 115 120 125

Leu Leu Val Leu His Ala Ile Ser Gly Pro Trp Thr His Phe Tyr Cys 130 135 140

Asn Lys 145

<210> 250

<211> 84

<212> PRT

<213> Homo sapiens

<400> 250

Phe Thr Gln Glu Ser Ser Arg Pro Ser Thr Phe Gly Ala Asn Leu Glu 1 5 10 15

Leu Gly Cys Arg Pro Ala Gly Thr Phe Ile Lys Cys Tyr Tyr Phe Ile 20 25 30

Phe Ala Ser Glu Glu Leu Pro Asp Phe Val Lys Thr Leu Cys Asn Pro $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ser Pro Phe Phe Trp His Ser Arg Gln Leu Asn Lys His Leu Leu Thr 50 60

Pro Leu Leu Cys Val Ile Arg Cys Glu Arg His Trp Arg Tyr Glu Glu 65 70 75 80

Pro Met Val Ser

<210> 251

<211> 62

<212> PRT

<213> Homo sapiens

<400> 251

Ala Pro Trp Gly Trp Ala Ser Val Ser Val Cys Ala Arg Leu Glu Met
Page 147

Ala Ser Arg Tyr Gly Leu Gln Glu His His Glu Val His Leu Ile Phe 25

10

Ala Phe Leu Cys Gln His Val Cys His Leu Gln Cys Leu Thr Glu His

Val Gly Pro Ala Met Trp Ala Val Ser Leu Pro Ser Ser Tyr

<210> 252 <211> 117

<212> PRT

<213> Homo sapiens

<400> 252

Lys Lys Glu Pro Thr Met Ile Trp Ile Leu Leu Ser Phe Leu Phe Ser

Gln Met Val Ile Leu Lys Leu Ile Glu Val Val Tyr Arg Val His Ser

His Thr Val Arg Lys Arg Gln Ser Gln Gly Leu Asn Ser Ser Ser Leu

Thr Ile Glu Pro Ile Phe Leu Ile Thr Ile Gln Tyr Phe Pro Ile Cys

Ser Ile Lys Arg Asn His Phe Ser Glu Trp Arg Asn Ile His Glu Asn

Lys Ser Ile Ile Gln Asp Thr Cys Lys Ala Ser Arg His Ser Arg Phe

Arg Leu Leu Ala Pro Trp Pro Arg Leu Ile Thr Phe Gln Glu Asn Lys

Thr Thr Tyr Gln Asp 115

<210> 253

134 <211> <212> PRT

<213> Homo sapiens

<400> 253

Thr Phe Ile Lys His Phe Phe Ser Gly Leu Ser Phe Ser Pro Ser Cys

His Val Ala Ile Ile Ile Phe Thr Ser Ala Ser Ala Tyr Phe Lys Pro 25

His Asn Lys Leu Leu Ala Phe Phe Phe Ala Ile Asp Asn Asn Leu Lys

Met Thr Gln Asn Phe Asn Gly Phe Ile Tyr Pro Gln Phe Tyr Asp Phe

Arg Ser Ser Phe Leu Cys Val Asp Leu Leu Ile Tyr His Phe Leu Ser

Thr Ile Thr Ser Phe Asn Leu Ser Cys Ser Thr Gly Leu Leu Thr Ile Page 148

85 Asn Phe Phe Ser Phe Ser Leu Ser Lys Asn His Leu Phe Ser Leu His 105 Phe Cys Lys Ile Phe Ser Arg Val Ile Lys Phe Val Thr Ile Phe Phe 120 Glu Tyr Phe Lys Asp Leu <210> 254 <211> 138 <212> PRT <213> Homo sapiens <400> 254 Thr Phe Leu Ser Arg His Phe Leu Met Trp Lys Arg Phe Thr Glu Ser

Asp Thr Phe Lys Gly Leu Thr Arg Asp Ile Cys Cys Leu Cys Leu Leu

Phe Ser Trp Arg Ser Ala Thr Asn Lys Ala Ser Ser Thr Gln Gly His

Leu Ser Thr Gly Leu Phe Leu Ser Ser Ser His Asn Leu Ser Cys His

Thr Ile Thr Ser Thr Thr Ser Leu Gly Pro Cys Ser Glu Pro Thr Phe

Phe Leu Pro Gln Val Gly Ile Ala Ser Ala Pro Tyr Cys Leu His Ser

Glu Gly Ser Tyr Val His Ala Leu Asn Lys Phe Val Ser Pro Ile Asn 105

Val Pro Phe Ala Ser Phe Phe Ser Glu Thr Ser Glu Val Gln Arg Gln

Pro Leu Pro Ser Ser Arg Cys Ser Thr Tyr 135

<210> 255

The Control of the Co

<211> 155 <212> PRT <213> Homo sapiens

<400> 255

Cys Lys Thr Gly Gly Leu Lys Leu Ile Phe Arg His His Gly Ile Leu

Tyr Arg Leu Ser Leu Tyr Leu Glu Asp Val Arg Leu Met Glu Val Leu

Ser Ile Leu Phe Pro Leu Leu Ile His Ser Phe Leu Phe Thr Glu Arg

Leu Asn Phe Leu Ser His Ile Ser Val Leu Leu Ala Pro Leu Phe Phe

Pro Leu Leu Gln Lys Ser Gln Pro Gln Lys Gln Ser Thr Tyr Cys Glu Page 149

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Lys Asp Phe Ser Asn His Lys Gly Asp Val Thr Leu Gly Leu Cys Phe
```

Leu Ser His Thr His Lys Ile Leu Asp Met Ser Glu Ile Leu Lys Asn

Trp Phe Leu Asn Val Met Lys Arg Val Ser Phe Ser Pro Glu Gln Asn

Asn Pro Cys Ser Leu Leu Pro Asp Met Gly Gly Phe Gln Ile Arg Asn 135

Leu Cys Ile Gly Pro Gln Ala Pro Asp Lys Val 150

<210> 256 <211> 185

65

<212> PRT

<213> Homo sapiens

<400> 256

Gly His Arg Pro Ser Phe His Phe Cys Lys Pro Arg Gly Ile Leu Thr

Asp Ser Thr Thr Tyr Pro Leu Leu Val Leu Ile Glu Glu Asp Thr Gly 25

Leu Lys Pro His Phe Phe Arg Ala Phe Val Cys Ile Ser Lys Ile Leu

Phe Tyr Arg His Leu Pro Phe Ser Phe Ile Phe Phe Leu Ser His Asn

Asn Ser Ala Phe Leu Leu Tyr Glu Cys Thr Ser Asp Leu Thr Gln Arg

Ile Gly Gly Gln Thr Asp Cys Leu Leu Ser Val Ser Cys Ala Leu Leu

Arg Arg Leu His Leu Ser Ala Asn Ser Ser Cys Thr Thr Phe Ser Asp 100 105

Phe Cys Cys Val Phe Ser Asp His Leu Leu Gly Ser Gly His Pro Leu 120

Asp Gly Ser Gly Leu Ser Val Ser Val Phe Gly Asn Trp Ser Asp Leu 135

Ala Leu Leu Met Gln Leu Lys Leu Arg Pro Leu Ser Leu Ser Gln Ala 155

His Ser Gly Cys Val Arg Phe Leu Leu Ser Leu Val Cys Ile His Pro

Leu His Val Gln Val Gly Ala Ala Lys 180

<210> 257

<211> 128

<212> PRT

<213> Homo sapiens

Asn Val Ile Phe Arg Gly Ala Ile Phe Cys Phe Gln Asp Phe Phe Lys 20 25 30

Glu Val Ile Leu Lys Ala Lys Phe Lys Glu Lys Glu Leu Val Ala Leu 35 40 45

Val Asp Pro Val Gly Ser Ser Phe Leu Cys Trp Ser Ile Phe Cys Ile 50 55 60

Pro Phe Glu Phe Ala Phe Leu Phe Asn Ile Phe Trp Tyr Ser Arg Phe 65 70 75 80

Leu Phe Phe Gly Thr Phe Val His Ile Asn Phe Leu Val Trp Arg Arg 85 90 95

Gly Ile Leu Ile Ala Asn Gly Thr Lys Val Tyr Arg Asp Ile Val Gln 100 105 110

Pro Leu Leu Phe Phe Leu Phe Leu His Ser Ile Leu Val Met Gly Asn 115 120 125

<210> 258

<211> 168

<212> PRT

<213> Homo sapiens

<400> 258

Leu Leu Ser Thr Val Ser Ser Leu Leu Pro Phe Leu Ile Glu Glu Phe 20 25 30

Asn Ala Cys Ile Cys Val Phe Ala Lys Lys Thr Pro Ser Ile Thr Cys 35 40 45

Ser Ile Tyr Glu Tyr Phe Trp Pro Leu Thr Gln Lys Val Leu Tyr Tyr 50 60

Arg Gln Lys Ser Thr Arg Lys Gln Ser Gly Thr Ser Ser Lys Arg Asp 65 70 75 80

Ser Ile Val Gly Lys Asn Thr Asp Pro Gly Gly Lys Leu Pro Gly Leu 85 90 95

Glu Ser Gln Leu Tyr Tyr Phe Gly Lys Thr Thr Tyr Leu Leu Tyr Leu 100 105 110

Phe Trp Tyr Pro Cys Leu Asn Gly Ser Asn Asn Asn Pro Leu Ile Ala 115 120 125

Leu Leu Gly Phe Asn Arg Ser Glu Asp Phe Arg Arg Ala His Asp Lys 130 140

Asn Tyr Ile Arg Val Thr Tyr Tyr Cys Tyr Pro Ile Cys His Ser Lys 145 150 155 160

Leu Arg Asp Leu Gly Gln Val Thr

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<210> 259
<211> 182
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<212> PRT

<213> Homo sapiens

<400> 259

Leu Val Glu Trp Ala His Ser Ser Met Arg Pro Ile Phe His Leu Asn 1 $$ 5 $$ 10 $$ 15

Phe Leu Cys Leu Arg Asn Glu Leu Tyr Ser Asn Leu Cys Phe Leu Lys 20 25 30

Ile Asn Val Phe Leu Val Lys His Leu Val Ser Ser Gln Ile Leu Phe 35 40 45

Lys Lys Thr Thr Glu Asn Ser Glu Glu Gly Glu Thr Asp Ser Ala Asn 50 55 60

Ser Ile Ser Val Pro Arg Leu Asn Trp Glu Met Leu Leu His Asp 65 70 75 80

Leu Gly Leu Ile Ile Cys Leu Gln Glu His Cys Phe Arg Val Val Trp \$95\$

Tyr Ser Gly Arg Asn Gly Leu Trp Ser Glu Ile His Val Gln Ile Pro 100 105 110

Ser His Leu Pro Ser Leu Ile Leu Ser Phe Leu Ile Cys Lys Met Thr 115 120 125

Ser Cys Cys Ile Leu Pro Ile Ser Ser Cys Arg Asp Arg Ile Phe His 145 150 155 160

Phe Ile Leu Ile Tyr Asn Tyr Val Ile Pro Phe Lys Asn His Pro Ser 165 170 175

Thr Phe Ser Ser Thr Arg

<210> 260

<211> 207

<212> PRT

<213> Homo sapiens

<400> 260

Cys Ser Leu Leu Asp Phe Leu Met Leu Val Gly Ala Leu Arg Lys Leu 1 $$ $$ 10 $$ 15

Cys Thr Lys Leu Asp Pro Val Leu Gln Gly Ser Asp Leu Thr Glu His $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$

Ser Ala Trp Gly Val Pro Leu Ile Trp Thr Trp Asn Ser Ile Ile Gln 35 40 45

Arg Pro Ser Leu Pro Cys Ser Leu Cys Val Thr Gly Ala Ala Glu Thr 50 60

Gln Val Leu Ser Ala Ser Ala Gly Leu Gln Pro Cys Leu Cys Leu Leu 65 70 75 80

Arg Ser Asp Ser Asn Cys Tyr Leu Trp Arg Trp Leu Phe Ile Gly Thr

Pro Phe Leu Cys Leu Thr Glu Ala Gln Cys Ser Lys Leu Glu Gly Leu

Cys Gln His Val Ser His Thr His Leu Leu Leu Phe Phe Ser Arg Val

Leu Gly His Leu Leu His Ile Thr Thr Ser Ser Pro Pro Ala Gln 135

Leu Ala Leu Ser Pro Phe Pro Ile Tyr His Ala Val Leu Glu His Lys

Ala Leu Leu Cys Ile Pro Cys Val Tyr Phe Val Val Met Cys Cys Ile 165

Leu Lys Glu Leu Asn Leu Cys Pro Gly Ser Arg Lys Asn Ala Asp Gln

Leu Leu Ala Ile Asp Gly Phe Asn Ile Ser Tyr Asp Trp Phe Leu

<210> 261

<211> 187 <212> PRT

<213> Homo sapiens

<400> 261

Gln Thr Lys Glu Glu Lys Gly Gln Val Lys His Thr Ile Gly Phe Thr

Val Asn Met Ser Lys Val Leu Leu Ile Ile His Phe Met Tyr Pro Arg

Leu Trp Lys Lys Phe Phe Phe His Leu Pro Ile Lys Asn Ile His Leu

Gly Ile Thr Thr Ser Trp Ile Leu Leu Asp Arg His Thr Thr Thr Leu

Thr Val Leu Pro Ser Ser Arg Arg Leu Ala Arg Lys Ala His His Pro

Leu Pro Gly Ser Lys Val Asp Ser Leu Ile Phe Cys Ile Asn Pro Thr

Pro Asp Ser Phe Ser Tyr Ser Leu Leu Pro Cys Leu Phe Ser Tyr Leu

Met Val Asn Val Phe Leu Ser Ser Cys Ile Thr Phe Tyr Ser Phe Leu

Glu His Ile Ile Ile Asn Lys Lys Ser Lys Ile Ala Met Val Ala

Arg Ile Pro Ala Pro Leu Asp Pro Ser Thr Ser Ser Fro Gly His

Thr Trp Gln Arg Glu Ile Lys Val Leu Asp Gly Ile Lys Val Asn Gln

Leu Thr Leu Lys Gly Glu Lys Glu Ser Arg Leu 180 185

<210> 262

<211> 149

<212> PRT

<213> Homo sapiens

<400> 262

Tyr Val Thr Ile Leu Leu Thr Val Leu Val Phe Leu Leu Arg Ser Leu 1 5 10 15

Pro Phe Gly Ile Arg Trp Ala Leu Ser Thr Gly Ile His Leu Asp Leu 20 25 30

Glu Val Ile Phe Cys His Val His Leu Val Ser Ile Phe Leu Ser Pro \$35\$

Leu Asn Gly Ser Ala Asn Pro Val Ile Tyr Phe Phe Val Gly Ser Phe 50 60

Arg Gln Arg Gln Asn Arg Gln Asn Leu Lys Leu Val Leu Gln Arg Ala 65 70 75 80

Leu Gln Asp Met Pro Glu Val Lys Val Glu Gly Gly Phe Leu Arg Glu 85 90 95

Pro Trp Ser Cys Arg Glu Ala Asp Ser Gly Ser Glu Glu Glu Pro Leu 100 105

Pro Cys Gln Ser Asp Gly Thr Leu Arg Ala Ile Leu Pro Cys His Ala 115 120 125

Gln Leu His Ala Phe Ser Cys Cys Ala Ser Glu Met Ser Gln Arg Leu 130 135 140

Lys Val Val Glu Met

145

<210> 263

<211> 207

<212> PRT

<213> Homo sapiens

<400> 263

His Trp Arg Ser Leu Val Thr Trp Ala Glu Tyr Leu Glu Pro Arg Ile 1 5 10 15

Ser Ser Ser Met Val Asp Gln Leu Cys Asp Gly Val Met Arg Trp Gly 20 25 30

Arg Arg Val Trp His His Ala Thr Gly Phe Pro Pro Lys Leu Ser Thr 35 40 45

Pro Arg Ser Thr Ser Ala Ser Gly Met Ser Ala Gly Ser Gln Arg Leu 50 60

Trp Arg Arg Gly Ser Ser His Ala Val Gln Ser Phe Asn Pro Leu Gln 65 70 80

Ser Ser Leu Ala Arg Glu Gln Gln Ser Leu Leu Glu Arg Asn Tyr His 85 90 95

Ser Lys Gln Glu Phe Arg Pro His Leu Ser Glu Asp His Val Glu Val

His Leu Ala Gly Lys Val Ala Ser Gly Cys Gly Leu Phe Asn Tyr Thr 115 120 125

Leu Leu Phe Thr Leu Phe Thr Ile Val Cys Lys Val Gln His Leu Gln 130 140

Ala Arg Asn Thr Gly Leu Pro His Ser Gly Trp Leu Gly Leu Met Lys 145 150155155

Ala Thr Lys Gln Cys Ala Gln Ser Lys Gln Arg Leu Pro Leu Ala Gly
165 170 175

Ala His Ser Pro Arg Glu Gly Ile Ser Phe Ser Leu Asp Leu Gly Ala 180 $$ 185 $$ 190 $$

Lys Ala Thr His Gly Ser Asp Gln Thr Thr Cys Ser Pro His Leu 195 200 205

<210> 264

<211> 204

<212> PRT

<213> Homo sapiens

<400> 264

Gly Ala Ser Ser Gln Tyr Gly Asn Glu Asp Gly Val Asn Leu Phe Pro $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Leu Met Ser Pro Pro Leu Tyr Thr Asn Leu Leu Lys Pro Thr Gly Lys 20 25 30

Leu Arg Leu Gly Asn Lys Asn Ile Lys Cys Tyr Val Gln Ile Leu Lys 35 40 45

Trp Asn Leu Lys Leu Leu Val Leu Gln Leu Phe Leu Lys Ile Pro Thr 50 55 60

Leu Ser Arg Ser Met Ser Phe Arg Glu Arg Thr Tyr Val Ala Arg Glu 65 70 75 80

Lys Ser Lys Glu Ser Met Asn Pro Val Leu Leu Ser Ile Leu Gln Cys 85 90 95

Trp Arg Pro Phe Ser Ile Phe His Ser Leu Gly Gln Ser Phe Asn Thr 100 105 110

His Leu Leu Lys Ala Ile Tyr Ile Arg Pro Cys Tyr Ser Lys Gly Thr 115 120 125

Val Gly Gly Glu Glu Arg Gln Asp Pro Thr Met Glu Leu Lys Ser Ser 130 140

Leu Asp Arg Phe Pro Phe Pro Ser Gly Gln Ser Lys Pro Asn Asp Thr 145 150 155 160

Thr Val Ser Ser Phe Pro Glu Gln Arg Asp Val Glu Asn Tyr Leu Phe 165 170 175

Thr Ile Val Arg Arg Gln Gly Trp Asn Phe Phe Gln Asn Lys Leu

Phe Phe Phe Val Lys Gln Gly Lys Ile Leu Leu

<210> 265

<211> 186

<212> PRT <213> Homo sapiens

<400> 265

Ile Ser Val Thr Asp Leu Ile Gly Gly Lys Trp Ile Phe Gly His Phe

200

Phe Cys Asn Val Phe Ser Val Asn Val Met Cys Cys Thr Ala Trp Ile

Leu Thr Leu Tyr Val Ile Ser Ile Asp Arg Tyr Leu Gly Ile Met Lys 40

Pro Leu Thr Tyr Pro Met Arg Gln Lys Gly Lys Cys Met Thr Lys Met

Ile Leu Ser Val Cys Leu Leu Ser Ala Phe Val Thr Leu Pro Thr Ile

Phe Gly Arg Ala Gln Asn Val Asn Asp Asp Lys Val Cys Leu Val Ser

Gln Asp Phe Gly Tyr Thr Ile Tyr Ser Thr Ala Leu Ala Ser Ser Pro

Cys Ala Ser Cys Phe Ser Cys Thr Asn Arg Phe Thr Arg Pro Pro Gly 120

Lys Ala Arg Pro Asn Thr Gly Tyr Leu Ala Ser Leu Glu Trp Ser Gln

Thr Ala Val Val Thr Leu Asn Gly Thr Val Lys Phe Gln Glu Val Glu 150

Glu Cys Ala Lys Leu Ser Arg Leu Leu Lys His Glu Arg Lys Lys Tyr

Leu His Leu Ala Glu Thr Glu Ser Ser Asp

<210> 266

<211> 184

<211> 164 <212> PRT

<213> Homo sapiens

<400> 266

Phe Thr Val Ile Asn Val Cys Ser Cys Thr Cys Glu Val Lys Ser Phe

Ser Leu Leu Ser Asn Ser Tyr Val Pro Asn Ile Phe Ser Lys Phe Leu 25

Lys Thr Tyr Asn Gly Glu Lys Asn Asn Pro Phe Ser Ser Pro Ala Ser

Leu Met Lys Asn Ser His Phe Ser Leu Phe Leu Leu Phe Leu Leu Val

Val Phe His Ile Ser Cys Leu Ser Ala Val Ser Cys Phe Met Gln Phe Page 156

70

Arg Pro Tyr Leu Leu Thr Ser Leu Ser Phe Gln Tyr Lys Asp Ser Cys 85

Ile Phe Ser Phe Asn Phe Thr Phe Leu Asn Ser Pro Phe Pro Phe Cys

Asp Pro Gly Ile Ser Gly Val Leu Phe Phe Ile Leu Pro Asp Phe

Ile Tyr Ile Cys Val Tyr Ser Phe Leu Leu Phe Phe Lys Leu Lys Thr 130 140

Cys Leu Ser Ser Lys Ser Gly Ser Phe Phe Phe Ser Trp Arg Pro Leu 145 150 155 160

Ser Gln Asn Pro Leu Ser Phe Cys Phe Asn Glu Asp Tyr Met Leu Ser 165 170 175

Leu Trp Leu Pro Ser Cys Asn Thr 180

<210> 267 <211> 201

<212> PRT

<213> Homo sapiens

<400> 267

Part of their test rethy at 8 8 8 that were built

Phe Pro Ser Leu Lys Asn Met His Phe Ser Val Pro Leu Arg Cys His 1 5 10

Thr Ile Ile Ser Val Gln Lys Arg Val Asn Thr Ala Asp Pro Arg Leu 20 25 30

Leu Leu Lys Cys Pro Ala Cys Lys Ala Gly Ser Trp Leu Val Phe $35 \hspace{1cm} 40 \hspace{1cm} 45$

Gly Val Leu Asp Phe Glu Lys Leu Pro Thr Ile Pro Ser Thr Gly Leu 50 60

Cys Lys Tyr Gly Leu Tyr Ile Pro Ala Phe Leu Leu Glu Leu Glu Phe 65 70 75 80

Ser Lys Tyr Glu Ala Lys Arg Ala Tyr Val Thr Ser Pro Gln Pro Trp $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$

Ala Leu Ser His Gly Thr Ser Leu Ala Gly Ser Val Ser His Val Leu 100 105 110

Ser Gln Phe Leu Ala Glu Arg Ile Lys His Ile Leu Cys Asn Phe Thr 115 120 125

Gly Lys Arg Ile Leu Glu Ala Val Pro Gly Phe Phe Arg Leu Phe Leu 130 135 140

Met His Leu Phe Leu Leu Ile Met Leu Arg Tyr Pro Ser Val Asn 145 150 160

Lys Ser Leu Ile Gln Leu Tyr Ala Lys Ser Tyr Glu Ser Gln As
n Arg 165 $$ 170 $$ 175

Gly Ile Ile Leu Gly Arg Pro Asp Thr Thr Lys Ile Asn Leu Lys Leu 180 185 190

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	Asn	Ser	Ser 195	Pro	Thr	Ser	Leu	Ser 200	Pro
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Tyr Ser Arg Gly Ser Thr Val His Thr Ala Tyr Leu Val Leu Ser Ser 20 25 30

Ile Trp Leu Leu Gly Phe Arg Met His Arg Asn Pro Phe Cys Ile Tyr 50 60

Ile Leu Asn Leu Ala Ala Ala Asp Leu Leu Phe Leu Phe Ser Met Ala 65 70 75 80

Ser Thr Leu Ser Leu Glu Thr Gln Pro Leu Val Asn Thr Thr Asp Lys 85 90 95

Val His Glu Leu Met Lys Arg Leu Met Tyr Phe Ala Tyr Thr Val Gly 100 105

Leu Ser Leu Leu Thr Ala Ile Ser Thr Gln Arg Cys Leu Ser Val Leu 115 120 125

Phe Pro Ile Trp Phe Lys Cys His Arg Pro Arg His Leu Ser Ala Trp 130 140

Val Cys Gly Leu Leu Trp Thr Leu Cys Leu Leu Met Asn Gly Leu Thr 145 $$ 150 $$ 155 $$ 160

Ser Ser Phe Cys Ser Lys Phe Leu Lys Phe Asn Glu Asp Arg Cys Phe 165 170 175

Arg Val Asp Met Val Gln Ala Ala Leu Ile Met Gly Val Leu Thr Pro 180 185 190

Val Met Thr Leu Ser Ser Leu Thr Leu Phe Val Trp Val Arg Arg Ser 195 200 205

Ser Gln Gln Trp Arg Arg Gln Pro Thr Arg Leu Phe Val Val Val Leu 210 215 220

Ala Ser Val Leu Val Phe Leu Ile Cys Ser Leu Pro Leu Ser Ile Tyr 225 230 235 240

Trp Phe Val Leu Tyr Trp Leu Ser Leu Pro Pro Glu Met Gln Val Leu 245 250 255

Cys Phe Ser Leu Ser Arg Leu Ser Ser Ser Val Ser Ser Ser Ala Asn 260 265 270

Pro Val Ile Tyr Phe Leu Val Gly Ser Arg Arg Ser His Arg Leu Pro 275 280 285

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S. A.

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